

MAY 16, 1936

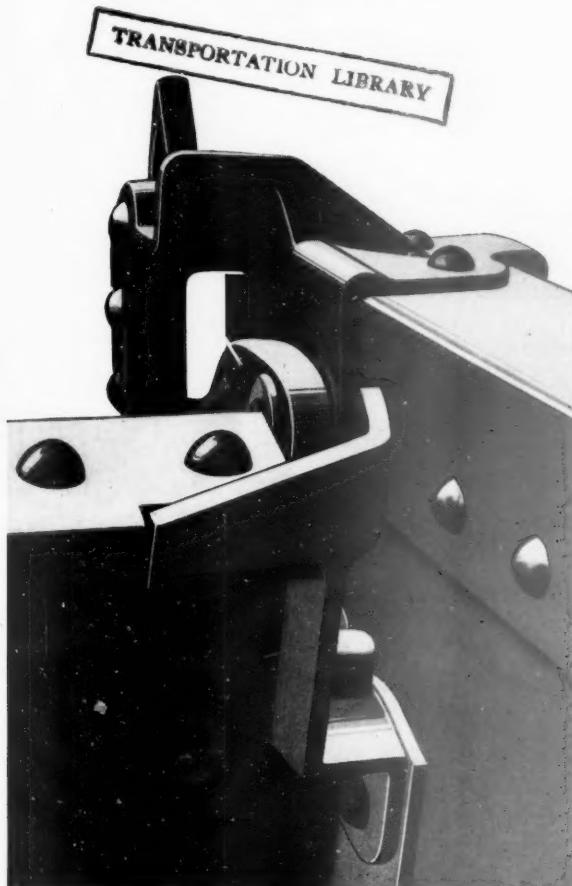
Railway Age

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Founded 1878
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May 16, 1936

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How to Increase Employment

President Roosevelt stated at his press conference on May 8 that special efforts were being made to devise means of increasing employment in the "railroad equipment" and housing industries. We assume that by "railroad equipment" is meant the entire industry that manufactures for railroads. Business and employment declined relatively more in the railway manufacturing and housing industries than in any others, the decline of business between 1929 and 1933 in the former being about 80 per cent and in the latter about 90 per cent. There has been some revival in both of them, but they still account for a very large part of the total unemployment.

Accounting for 4,000,000 Unemployed

The American Builder for May gave the following figures: Contracts for residential building in the first quarter of 1936 were \$136,275,000, or only 27 per cent as large as in the first quarter of 1929. Contracts for other building were \$601,000,000, or only 44 per cent as large as in 1929. Contracts for all building in the first quarter of 1929 were \$1,867,000,000, and in the first quarter of 1936 only \$737,275,000, or but 40 per cent as large. This difference between building in 1929 and 1936 is sufficient on an annual basis to explain the continued unemployment of 3,000,000 persons.

Total railroad purchases from manufacturers in 1929 were about \$1,275,000,000. In 1935 they were about \$500,000,000. This decline in railway purchases was sufficient to explain the unemployment last year of at least 500,000 persons in the manufacturing industry and industries supplying it materials. There were also 630,000 unemployed railroad men. In the first four months of 1936 railroad buying from manufacturers amounted to about \$230,000,000. This was almost double what it was in the first one-third of 1935. But it was at an annual rate only about one-half as great as in 1929, which was still sufficient to account for the unemployment of probably 250,000. In the first third of the year there were still also 580,000 less railway employees

than in 1929, although 51,000 more than in the first third of 1935.

Conditions in Building and Railway Manufacturing

Present conditions in the building, railroad and railway manufacturing industries alone are sufficient to explain the unemployment of about 4,000,000 persons; and the conditions in these industries are interrelated. As the above figures show, while there has been relatively a large increase of building, and especially of residential construction, since the bottom of the depression was reached, total expenditures being made for all building even now are still about 60 per cent less than in 1929. The railroads are dependent for a large part of their freight upon the building industry; and the continued failure of building as a whole to revive on a large scale is principally responsible for the fact that railroad freight loadings in the first four months of 1936 were still 35 per cent less than in 1929. Forest products and ore are the principal raw materials of building. Owing to the lagging of building the loadings of forest products and ore in the first one-third of 1936 were 55 per cent less than in the first one-third of 1929.

A large increase of building would cause a substantial increase of freight loadings. Other things being equal, this would cause a substantial increase of railway net operating income which, in turn, would cause a substantial increase of railway buying from manufacturers. This would further increase railroad loadings. The increases of building, of manufacturing for railways and of railway traffic would increase employment in the industries that now account for approximately 4,000,000 of the unemployed, and probably thus stimulate business in general enough to cause virtually complete recovery.

How Stimulate Building?

How, then, stimulate revival of the building and railway manufacturing industries?

Nobody can answer this question without either

espousing or attacking the fundamental economic principles and policies of the New Deal. The main policies of the New Deal have been based upon the assumption that the only way to promote recovery is to increase the *purchasing power of the individual*, regardless of the immediate effects upon the *purchasing power of business*. The policies that have been based upon this assumption throughout the last three years are principally responsible for the continuance of large unemployment in building and railway manufacturing industries. The reason is that most building, and all buying from the railway manufacturing industry, are *done by business*; and these New Deal policies have *curtailed the purchasing power of business*.

About one-half of all residential buildings are erected by individuals to provide themselves with homes. The other one-half of residential buildings, and practically all other buildings, are erected by business either to be sold, or to be used by it, for increasing its profits. Make costs too high for building to be profitable, and it will not be done. Make them low enough for it to be profitable, and it will be done. Reductions of hours of work, without reductions of daily or weekly pay, increase average hourly wages, and thereby increase the costs and reduce the profits of producing building materials and erecting buildings. This was the policy of NRA. This is the policy advocated by President Roosevelt in a recent radio address. NRA and the increased costs it has left behind it have seriously hindered building; and it would be further hindered by the policy advocated in the President's radio address.

The President said in his press conference that there are enormous possibilities in the development of mass production methods for constructing suitable houses in the lower price field. The experience of those who have experimented in this field indicates that if we must wait for the development of mass production of housing, recovery from the depression will be indefinitely postponed. On the other hand, building would be immediately and greatly stimulated by the acceptance by labor in the building trades of lower hourly wages. The resulting increase of building would greatly increase employment and afford most workers now employed in building larger wages per week. There is only one way fully to revive building. This is to make it *profitable for business* to build.

How Stimulate Railway Buying?

As to increasing railway buying, this paper repeatedly has demonstrated with irrefutable statistics that the volume of buying done by the railways from the manufacturing industry is determined by the amount of net operating income that the railways earn. This has always been true, and the New Deal has not available any economic legerdemain by which it can be changed. The net operating income earned by the railways and their purchases from manufacturers were both 55 per cent less in the five years ending with 1934 than in the five years ending with 1929; and policies followed

by the government throughout the last three years have constantly curtailed the increase in net operating income required to bring about a large increase in railway buying.

Its policies of advancing wages and prices under NRA, and the restoration of hourly railway wages to the pre-depression peak in accordance with its policy of advancing wages in general, have increased railway operating expenses since 1933 at an annual rate of \$300,000,000, and correspondingly curtailed net operating income and buying. Its social security, railroad retirement and Guffey coal legislation passed at the last session of Congress are calculated to add about another \$100,000,000 annually, with the same effects. Net operating income has increased since last July in spite of these actual and prospective increases in operating expenses; and it is entirely due to this that railroad buying thus far in 1936 has been almost twice as large as in 1935. Whether the increase of railway buying, and consequent increase of employment in the railway manufacturing industry, will continue will depend entirely upon whether the increase of railway net operating income continues.

What, then, is going to be the government's future policy in dealing with the railways? The Roosevelt administration deserves credit for having tried to improve their situation by favoring comparable regulation of them and other carriers. It could contribute further toward the same end by giving its support to the Pettengill bill for modification of the long-and-short-haul provision of the Interstate Commerce Act, which has passed the House of Representatives and is now pending in the Senate. Whatever it does to help increase railroad earnings will tend to increase employment on the railways and in the railway manufacturing industry. Whatever it does to further increase railway operating expenses and taxes will tend to curtail employment on the railways and in the railway manufacturing industry.

Needed—Policies Based on Facts

How to revive building and railroad buying, and employment in the building and railway manufacturing industries, is quite plain to those who base their reasoning on experience and facts. They have both repeatedly declined greatly in previous depressions; and both have repeatedly revived. Their revival during the present depression has been hindered and delayed more than ever before by policies that have defied experience and facts. They will revive again when experience, facts and logical reasoning from them are allowed again to dictate government and business policies.

The way to revive building is to adopt policies that will make it presently and prospectively profitable for private capital to build. The way to revive railway buying is to help railway managements, instead of handicapping them, in their efforts to increase net operating income. And there is no other way to restore employment in the building and railway manufacturing industries.

"Trial by Fury"

We reproduce herewith a circular, presumably being distributed among its members by the Merchant Truckmen's Bureau of New York. This organization was a leader in the fight against the original collection and delivery tariffs which were suspended by the Interstate Commerce Commission on the eve of their effective date, April 1, although the Commission had previously permitted similar tariffs in the West and South to become effective. The only new element which entered into the case of these tariffs in the East which was not present in the Western and Southern cases was the truculent opposition of the local truckmen, primarily those in New York City. They pleaded their case at that time by inflammatory advertising in the newspapers and by signs on their trucks such as "Suspend the Store Door Tariffs" and "This Truck Protects You from Railroad Monopoly."

At the time of this suspension, we said editorially (in our April 4 issue) that "nothing that the Commission can discover in the seven months' suspension period and no changes that it can make will allay the opposition of the local truckmen." The Commission, by approving collection and delivery tariffs which eliminate the allowance for shippers who perform their own cartage, has removed one of the main arguments the truckmen used against the original tariffs, but it has not thereby alleviated their opposition in the slightest. Any collection and delivery tariff which is likely to attain its objective of transferring local cartage to the railroads will continue to meet the opposition of the local truckmen. The fairer the tariff is to the public and the greater its popularity with shippers, the greater the opposition of the local truckmen is bound to be.

As we predicted they would do, the truckmen attributed the suspension of the original tariffs to the political ballyhoo they raised against them—as is shown by their preparation to repeat the identical tactics now.

In the circumstances, we can only observe, as before, that if the Commission has any concern for the maintenance of its quasi-judicial status, it had better take cognizance of these novel tactics and scotch them before

TRUCKMEN RALLY!

Permission has been granted by the Interstate Commerce Commission to the Pennsylvania, Erie and Grand Trunk Railroads, etc., to extend their "free" store door trucking service, which has existed for local freight rail-hauled for distances up to 260 miles to freight that is rail-hauled 261 miles or more (WITH NO FIVE CENT ALLOWANCE TO SHIPPERS.)

This has forced other railroads to meet this competition so that practically ALL Eastern railroads propose to inaugurate a completely similar service on May 25, 1936. Steamship Lines, Carloading Companies, etc., will probably follow.

The Interstate Commerce Commission must be persuaded to reconsider the granting of this permission pending the result of their investigation into the "collection and delivery" service, which they have decided to make.

If this extension of store door service by the railroads is permitted to become operative pending this investigation, our business will have been ruined beyond repair and the result of this investigation will be of no avail to us.

THE OFFER OF FREE TRUCKING BY THE RAILROADS IN COMPETITION WITH LOCAL TRUCKMEN, WHO DO NOT COMPETE WITH THEM, VIOLATES EVERY AMERICAN CONCEPT OF FAIR PLAY AND OF FAIR COMPETITION.

IT MUST BE RESISTED TO THE UTMOST.

YOU ARE FIGHTING FOR YOUR BUSINESS LIVES AND FOR THE WELFARE OF YOUR FAMILIES.

WE MUST GET INTO ACTION IMMEDIATELY! THERE IS NOT A MINUTE TO SPARE.

CONTRIBUTE ALL YOU CAN AFFORD TO OUR FUND FOR CARRYING ON — TELL YOUR NEIGHBORS ABOUT IT — BRING YOUR EMPLOYEES TO A

MASS MEETING
IN THE AUDITORIUM OF
WASHINGTON IRVING HIGH SCHOOL
Irving Place at Seventeenth Street
ON
Wednesday, May 13, at 8 P. M.

Merchant Truckmen's Bureau of New York, 240 W. 14th Street, New York, N. Y.

they become more extreme. The mob spirit feeds on itself, and a continuation of this sort of thing would give procedure before the Commission the aspect of what has been called "trial by fury."

Railway Management Must Be Progressive

"It is the task of the railroads to exert themselves to the utmost to win back to the rails some of the traffic which has been lost to the highways and waterways. Much has been accomplished in this direction of late through the use of pick-up and delivery service and other devices. It may be that other and better methods may be adopted in the revision of their rate structures and operation of trains.

"Railway investors need to be assured that the railways are exerting themselves to establish in railway management and operation the same aggressive policies that have resulted in the expansion of the business of their competitors. The railways will best protect themselves from unwarranted legislative interference by convincing the American public that, individually and as an industry, they are measuring up to the standards of modern management. The present seems to us a challenging period for leadership in the railway field.

"The gross revenues of the railroads also can be improved by favorable legislation having a tendency to bring about

equality of opportunity to compete with other carriers. This is particularly true with reference to the regulation of water carriers and some change in the long-and-short-haul clause.

"The second major aspect of this problem is to reduce expenses and from this standpoint the future holds promise. Every rational opportunity to co-ordinate and consolidate facilities and practices wherever there is a prospect of saving money should be embraced. Railroads should be encouraged to consolidate along normal, healthy lines.

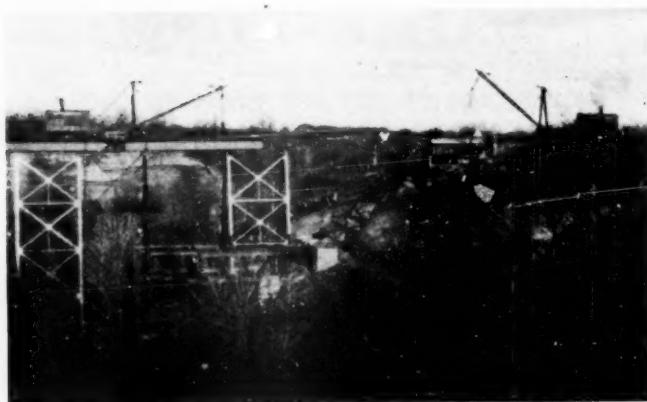
"It is realized that those who are carrying on the work of the central organization of the railroads are dealing with a difficult problem. We make cordial acknowledgment of the effort which the Association of American Railroads has put forth to improve the industry. Mutual savings banks can be helpful in the railways' efforts to cultivate better public appreciation that the railroads are still necessary agencies of transportation, and that the public's interest demands they be not crushed by short-sighted legislative policies and public indifference."

—Henry Bruere, president of the Bowery Savings Bank, New York, in an address before the National Association of Mutual Savings Banks

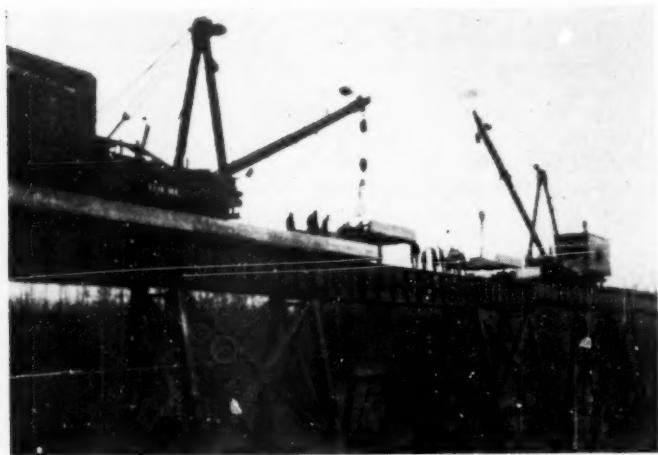
Shift 90-ft. Towers Viaduct



New East Tower on Falsework Ready to Be Moved to Replace Old Tower (at the Left)



The New East Tower Being Moved—Dismantled Old Tower Lying on the Slope



Both Derrick Cars Were Used to Place the Floor Slabs

Unique replacement procedure adopted by Nickel Plate to permit new columns to rest on the old pedestals—Mortar cap over cover plates evens up girder flanges to receive precast floor slabs

MARKED departures from current practice were involved in the recent replacement of a steel viaduct on the Nickel Plate at State Line, Pa. Unusual details were embodied in the top flanges of the girders to provide an unbroken plane surface to receive precast concrete deck slabs and, what is more unusual, the new towers were placed on the pedestals that had carried the old ones, in spite of the fact that the tops of the pedestals had to be repaired before they could receive the new column bases.

While the tower-and-girder steel viaduct has long been accepted as the most economical means of carrying a railroad across deep ravines, the obstacles attending the replacement of such a structure have been deemed so formidable that the problem has usually been solved by erecting the new structure on an offset location, or, if the original alignment must be retained, by building new pedestals under the old clear spans so that the new towers may be erected without interference with the old ones.

Bold Construction Procedure

The plan adopted by the Nickel Plate, in spite of precedent to the contrary, was a practical one only because it embraced a bold construction procedure—the erection of the new towers in offset locations under the clear spans, followed by the shifting out of the old towers (lengthwise of the bridge) and the shifting in of the new towers. A measure of the task involved is afforded by the fact that this procedure was applied to three towers 90 ft. $7\frac{1}{4}$ in. high, each weighing 185,275 lb., and two others only about 4 ft. shorter. Further complications were involved in the replacement of the two towers on the end slopes in which the legs of the two bents were not of the same length.

The old State Line viaduct, built in 1903 for a loading equivalent to about E40, had a length of 711 ft. 11 in., and consisted of seven towers with 30-ft. girder spans and one short rocker bent, that supported nine independent spans of which there were seven of 60-ft. and two others that were 52 ft. and 30 ft. long, respectively. The single track, on level grade, was carried on an open deck. The pedestals, of concrete on rock foundation, were in such condition that only a limited amount of repair work and alterations were required to render them suitable for continued use, and this was true also of the two old stone masonry abutments.

The new steel, designed for E70 loading, is of the same dimensions as the old, except that the girders are deeper, while the columns are shorter by reason of the

Between Trains in Viaduct Renewal

greater floor thickness, deeper girders and the thickness of a two to three-inch cap placed on top of the pedestals as a repair measure.

As the flanges of the 30-ft. tower girders have no cover plates, they provide a smooth surface to receive the deck slabs, but the flanges of the longer intermediate spans present the usual stepped top due to cover plates in three lengths. To provide a smooth top for these girders they were covered with a cap of Portland cement mortar to an even surface $1\frac{1}{4}$ in. above the top cover-plate (to cover the rivet heads), this cap being retained by a curbing composed of steel strips 1 in. wide and of the necessary depth, that were welded to the top flange along both edges and the two ends. To insure non-shrinking properties of the mortar, it was made of equal parts of Portland cement, sand, and an admixture known as Embeco (Master Builders Co.).

The concrete floor slabs are distinctive by reason of their size. They are 15 ft. long and weigh 15 tons. The abutting ends are joined with a halved or ship-lap joint, while the $1\frac{1}{8}$ in. gaps provided over the expansion ends of girders are filled with expansion joint material $1\frac{1}{4}$ in. thick. The slabs are covered with a three-ply asphalt waterproofing comprising two layers of fabric and one of felt, and protected by one-inch preformed asphalt plank. A special feature of the floor is a sidewalk along one side, consisting of precast concrete slabs 2 ft. 4 in. wide, by 4 in. thick supported on steel brackets cantilevered from the parapets of the track slabs. Alternate brackets support 5-in. by $3\frac{1}{2}$ -in. by $\frac{1}{16}$ -in. angles that serve as posts for a pipe hand rail.

In addition to the lowering of the bridge seats on the abutments made necessary by the greater distance from rail level to the bottom of the new girders, some alterations of the pedestals were required by reason of slight changes in the locations of the new column bases. However, the principal work done on the latter consisted of the jacketing of several units that were in a deteriorated condition and the application of caps from two to three inches thick to correct the shattered condition of the pedestal tops. As these caps had to be applied without disturbing the old column bases, a wood frame was placed around the latter so as to leave a recess that was filled between the time that the old towers were removed and the new ones were set in position. All of the concrete used in these caps contained Embeco as an admixture to avoid shrinkage.

Towers Erected on Falsework

All of the new towers except the ones at the west end of the viaduct were erected on falsework consisting of steel beams, placed longitudinally, on frame bents, blocking or sills. In the case of the second tower from the west end, which had to be placed directly over the stream bed, girder spans previously removed from the old viaduct were used in the falsework. Except in the case of the most easterly tower, each set of falsework was extended under the old tower and for a distance of some 30 ft. beyond its east bent. Thus, the falsework could



A View of the Falsework Under the New East Tower



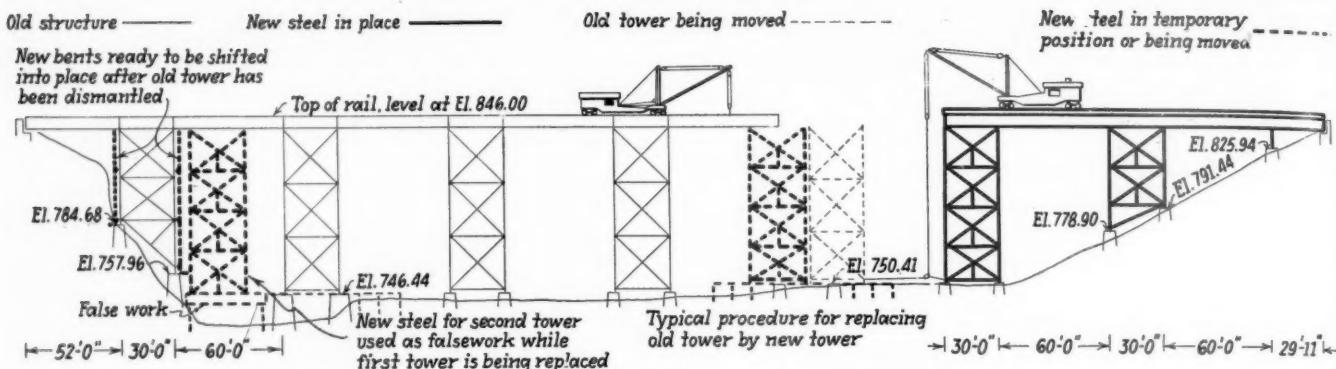
Lifting Bracket Provided for Jacking Up the Old Towers—Note the New Cap on the Pedestal, the Recess Occupied by the Old Column Base Was Filled After the Old Tower Was Moved

serve as the support for a track on which the new and old towers could be moved east to effect the replacement of the old towers by the new ones.

In general, the replacement proceeded from east to west, but as the procedure followed on the five intermediate towers was substantially the same in all cases, it will be described first. Brackets bolted to the outside faces of the new and old columns, afforded the means of transferring the weight of the towers from the pedestals to heavy roller dollies on rails that were supported on tie blocks on top of the falsework beams. Large hydraulic jacks placed on the dollies were used in lifting the towers. Two bridge derrick cars with their forward ends facing each other were employed in handling the girder spans and other work. The hoisting equipment was of sufficient capacity to erect the girders in pairs with cross and lateral bracing in place. The typical routine in the replacement of one tower, together with the tower girders and the 60-ft. span to the east of it, was as follows:

Replacing the Towers

When the track was cleared, the rails and ties were removed from the tower span and the old 60-ft. span on the east side of the tower, the west derrick car removed the tower girder span, while the other one removed the 60-ft. span. The 60-ft. span on the west side of the old tower was not removed, but its east end was lifted clear



Elevation of the Viaduct, Showing Typical Tower Replacement Procedure and Method Employed at the West Tower

of the old tower by the west derrick car from a position over the next tower to the west.

In the meantime, the weight of the new and old towers had been transferred to the dollies, and a four-part tackle, which had been reaved between the bases of the towers to be moved and the base of the next tower to the east, was carried up to the east derrick car, which was stationed on the deck back of this tower. With this rig the two towers were then hauled half of the required distance to the east.

This operation exposed the recesses that had been left in the tops of the pedestals when they were capped, and permitted the filling of these recesses with the non-shrinking mortar. The shifting of the towers was then com-

pleted and the new tower was landed in position on the pedestals.

Following this step, it was necessary to introduce two operations that were occasioned by the fact that the tops of the new towers were about 30 in. lower than the old ones. The top of the old tower had to be burned off to provide adequate clearance for the deeper 60-ft. span to the east, which was erected by the east derrick car, and it was necessary to provide a bolster 30 in. deep on top of the west bent of the new tower to provide a temporary support for the old west 60-ft. span. This bolster was set in place with an auxiliary line from the west derrick car, while the main fall line was being used to hold the east end of the girder span clear.

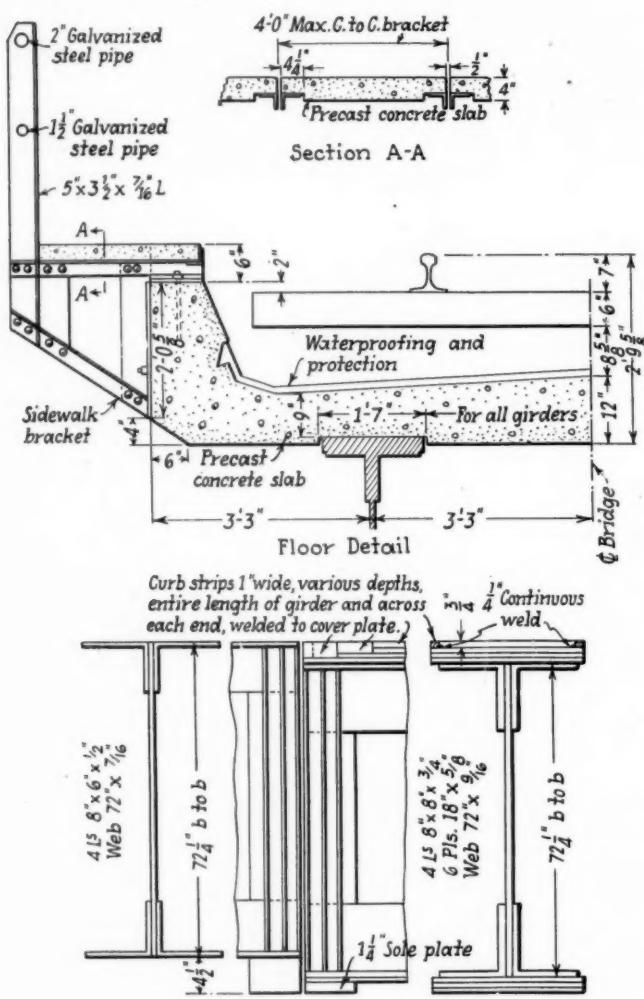
Placing of Floor Slabs Followed

Following the erection of the new east 60-ft. span and the 30-ft. tower span, the six floor slabs were set by the two derrick cars, the track was replaced and blocked up on the slabs for the restoration of traffic, pending the completion of the waterproofing and the application of the ballast.

A modification of the procedure described above had to be introduced in the replacement of the old tower at the east end of the viaduct because the ground slope prevented the rolling of this tower out of the way. Accordingly, it was necessary to dismantle this tower piece-meal before the new tower could be rolled into place. Another expedient was adopted for the change at the west tower. Here, the bents of the new tower were erected independently as close as possible to the corresponding bents of the old tower, while the new steel for the next tower to the east, instead of being erected close to the tower it was to replace, was set up temporarily close to the old west tower. In this position it could be used as falsework to support the west end of the old 60-ft. girder span while the old end tower was being dismantled and the new bents were moved into position and the tower bracing applied. The old tower span and the 52-ft. end span, which had previously been removed, were then replaced by the new spans.

A notable feature of the operation was the ease and accuracy with which the towers were brought to exact center. There was a jack at each column and by manipulating the lowering, one jack at a time, each column was landed on exact center. As a result of this the girders went into place accurately. The steel fitted remarkably well, it being necessary to ream only a few holes in one connection. As a result of accurate field work and close supervision, no adjustment of level was required.

The first tower change was made on November 18, 1935, and the last one, at the second tower from the west end, on December 20, the work being done in each case during the morning hours when no passenger train move-



Typical Elevation and Section of Girders

Girder Span and Floor Details

ments are scheduled at this location. The first change, at the east tower, was started at 6:30 a.m. and completed at 12:05 p.m., a total elapsed time of 5 hr. 35 min. For all the other changes, the time required ranged from 3 hr. 15 min., to 4 hr. 15 min.

The steel was fabricated by the McClintic-Marshall Corporation (now the fabricating and construction division of the Bethlehem Steel Company, Bethlehem, Pa.), and erected by the Ferro Construction Company, Chicago.

The new State Line viaduct was designed under the direction of G. H. Tinker, bridge engineer, and F. S. Hales, assistant bridge engineer of the Nickel Plate, who, with J. C. Wallace, assistant chief engineer of the Nickel Plate and H. B. Sierts, president of the Ferro Construction Company, developed the erection procedure

the important part which that city has played in this thrilling drama. But the main theme of *Wings of a Century* remains, and several of its scenes have been retained to carry it. These include: The New York waterfront at the time of the arrival there of the Clermont, with the scenes of mirthful skepticism and excitement that greeted Fulton's invention; Baltimore docks in 1830 with Peter Cooper and his Tom Thumb braving the mirth of their day to prove steam railways practicable; the Gold Rush of '49; Sacramento and its famous night-boat scenes with the rush of gold to San Francisco; Promontory Point and the historic "meeting" of the Union Pacific and Central Pacific; and the sand dunes of Kitty Hawk, with the Wright Brothers making their first historic flight. Added scenes will include the memorable visit of Lincoln to Cleveland enroute to his inauguration, and his "return" in the historic funeral train, epitomizing briefly but pointedly the Civil War period.

For this pageant a mammoth open air amphitheatre with a seating capacity of 4004, and a triple stage, designed by one of Cleveland's leading architects, are being built. The stage will have a maximum width of 265 feet and a depth of over 100 feet. Over 3000 feet of track will be needed to move "across stage" and provide yardage for, when not in use, the 12 locomotives (with their trains) taking part in the pageant.

The "parade" of locomotives will be in historic sequence; the little Tom Thumb, chugging by on its own steam; the DeWitt Clinton, with its train of "baby" coaches, that made a record of 14 miles an hour the following year; that grass-hopper like comic, the Atlantic; those balloon stack survivors of the B. & O., the William Mason and Thatcher Perkins; the Union Pacific No. 9; the New York Central's more modern and famous 999, whose record was 11½ miles an hour, made in 1893, held good for 25 years; and the Burlington No. 9, the "Pride of the Prairies." All these relics Mr. Hungerford has been able to assemble, along with super-giant locomotives of today from five representative railroads.

Besides these huge stage "props" there will also be sailing ships, canal boats, steamboats, covered wagons, stage coaches and horse-drawn vehicles of every description: automobiles from the earliest "one lunger" to today's streamlined limousines and motor coaches; planes from the Kitty Hawk to the modern airliner. And all set amid scenes and incidents, and to music, appropriate to their own day and generation. Fifty horses and a cast of over 200 will be used in the presentation. The pageant will have its first performance on June 27.

To railway men, the large interest in the Cleveland pageant comes from the fact that it was made an integral feature of the forthcoming Cleveland centennial exposition at the instance of the railroads entering that city which, because of this fact, contributed generously to the underwriting of the exposition. Many railroad executives have developed a strong belief in the value of large railroad shows as a publicity medium for the roads themselves. The success of the Baltimore & Ohio in staging *The Fair of the Iron Horse* at Baltimore in the fall of 1927 in commemoration of its own centennial—incidentally this entire celebration was under the direction of Mr. Hungerford—as well as of *Wings of a Century* at the Chicago Fair, has shown that the lay interest in the railroads, which comes to the fore at times such as these is not to be carelessly overlooked. The fact that people in great numbers will go voluntarily to these transportation pageants and return, again and again, to them, as has been definitely proved, is significant.



Derrick Cars Setting New Girder Spans After New Tower Replaced Old One

employed. The project was under the general supervision of A. C. Harvey, chief engineer, and Mr. Wallace, and the field work was under the direction of W. Sprague, division engineer, with B. W. Merrill as resident engineer. The total amount of structural steel used in the new viaduct is 1,020 tons, including fastenings and 13,290 lb. of temporary material.

A Pageant of Transport Progress

TRANSPORT development is the theme of the pageant which Edward Hungerford has written and will produce for the Great Lakes Exposition at Cleveland, under the title, "Parade of the Years." It will, in fact, be a new and amplified edition of his now famous *Wings of a Century*, produced for the Chicago World Fair in 1933-4 and shown to over a million and a quarter visitors. It is still the stirring romance of America's growth and expansion, within the short span of a century and a half—the epic of America's conquest of a wilderness, told and pictured in terms of highway, water and rail transport. Only the high spots can, of course, be touched in an hour-and-half's presentation, but historical incidents have been so selected and arranged as to present a comprehensive picture of this progress from the days of the redman, covered wagon, the stage coach and the canal boat to transport in 1936.

The focal point of the new pageant has been shifted, quite naturally, to Cleveland—"upborn of water traffic on Lake Erie and the Northern Ohio Canal," and now one of the country's greatest railway centers—to point

Regulation Thicket Needs Thinning*

Has developed into illogical and dangerous tangle and should be stripped down to fundamentals—Specific proposals for reform

By Harry Guy Taylor

Chairman, Western Association of Railway Executives

ABANYAN tree is one of nature's phenomena. It grows by sending downward shoots from each branch, which take root in the soil, and the branches from this new trunk in turn send their shoots to the ground. Thus a single tree may, in the course of time, spread over acres of ground. The banyan tree has its counterpart in the field of transportation. A little less than fifty years ago Congress planted the seed of a new idea in the federal statutes of this country. The growth from that planting has likewise been phenomenal and the manner of it very like the growth of the banyan tree. The thicket of regulatory legislation thus produced is still spreading, and threatens to choke the life out of private operation.

A Slender Beginning Now Waxed Fat

Following a decade of anti-railroad agitation in the granger states, Congress, in 1887, passed an "Act to Regulate Commerce." This Act created a commission of five members. It prohibited unjust discrimination, and pooling of freight or earnings; required transportation charges to be just and reasonable and that they must be published, but did not give the Commission power to make them. The Act contained the first "long and short haul" clause and authorized a uniform accounting system. In short, Congress embodied in the law the fundamentals of a right relationship between carrier and public, but declined to clothe the Commission with more than mild supervisory authority. The seed had been planted, however, and in the next three sessions of Congress the tree began to grow. The Commission was empowered to summon witnesses and compel testimony and the production of documents. The "Safety Act" was passed in 1893 and an Act requiring the reporting of railway accidents in 1901. The Elkins Act, aimed at rebates, became a law in 1903.

The tree was spreading and the reasonable rate limb sent a shoot to the ground in 1906, when the Hepburn Act was passed. This increased the membership of the Commission to seven and gave it power to make just and reasonable *maximum* rates and to prescribe the division of joint rates. The Act also contained the "commodity" clause, and made certain violations punishable by imprisonment. Pipe lines, express companies and sleeping-car companies were also made subject to regulation. For the first time the tree of regulation began to crowd into the adjoining field of private management. Thenceforward, hardly a session of Congress that did not pass additional railroad legislation.

The "Hog Law" and Its Numerous Brethren

The Hours of Service Act in 1907, the Ash-Pan Act in 1908, Transportation of Explosives Act in 1909, the Mann-Elkins Act in 1910, also the Safety Appliance

Act in that year, the Boiler Inspection Act in 1911, the Panama Canal Act in 1912, the Valuation Act in 1913, the Adamson Law in 1916, the Car Service Act in 1917, and in the same year an amendment to the Interstate Commerce Act enlarging the Commission to nine members and authorizing it to function through divisions; the Federal Control Act in 1918 and finally the Transportation Act in 1920.

This accumulating legislation reflected a strengthening purpose on the part of the federal government to abrogate the powers of railroad management and to lodge in the Commission the functions of managerial discretion. For example, the Mann-Elkins Act prohibited the increase of a rate that had been reduced to meet water competition unless the increase could be justified on changed conditions not related to water competition; likewise, the Panama Canal Act authorized the Commission to compel physical connection and joint rates between rail and water carriers, at the same time prohibiting any railroad from owning or operating ships through the Canal. There was a steady march by government forces toward a paternalistic supervision of all railroad operation. The passage of one law seemed to call for the passage of another, the assumption of one power seemed to lead to a demand for still other powers to make the exercise of the first effective. Never was there a thought of repealing any of the legislation.

Correcting One Error by Committing Another

It is not denied that there was justification for some of the measures adopted. Rebates, discriminations and unwarranted meddling in political affairs on the part of the railroads called for corrective action. Moreover, the railroads throughout this period enjoyed a monopoly of transportation, and legislative restraints were substituted for the control that would otherwise have come from competition. Undoubtedly, much benefit accrued to both the public and the railroads from the stabilization that ensued. The point I wish to emphasize, however, is that the original reasons for regulation were rapidly being lost sight of in the changed conditions which it seemed to produce. Like an abnormal cell, which grows by reproducing itself, regulation seemed to create necessities that called for more regulation. It was not enough, for example, that the law should declare that rates should be just and reasonable and non-discriminatory. Soon the Commission was authorized to fix the maximum beyond which such rates might go and to determine their division between railroads. Next, the Commission was to see that certain rates could not be made at all if they interfered with water competition, and *all* proposed new rates could be suspended to give the Commission opportunity to investigate them.

The next step was to amplify the power of the Commission so that it could fix *minimum* rates, and in the exercise of that power it was given such latitude that it feels justified in considering economic and social as

* From a recent address before the Associated Traffic Clubs of America at New Orleans.

well as transportation necessities. The extent to which the Commission feels it can go is illustrated by its recent decision in the passenger rate case where, after finding that the railroads were not earning a fair return on their passenger business, it issued an order drastically reducing passenger fares. In other words, the original purpose, which was to protect the public against exactions and harmful practices through statutory prohibitions administered by a Commission, has gradually given way to an invasion by the government of the realm of private management, and has developed into a vast system of laws and orders, formulas and theories, rulings and interpretations—contradictory, arbitrary and oppressive—which rides like an old man of the sea upon the back of a great industry.

If the tendency to grow had ended with the passage of the Transportation Act in 1920, the railroads might have found ways of adapting themselves, although the advent of new and aggressive forms of transportation would have made that exceedingly difficult. But the banyan tree is still spreading.

Railroad Punished Severely for Guessing Wrong

The Transportation Act still remains as comprehensive and drastic a piece of regulatory legislation as was ever written into the federal statutes. The equally drastic NRA, which provoked such vociferous rebellion on the part of private business, was found invalid by the Supreme Court, yet the basic principle of that law is a fundamental requirement of the Interstate Commerce Act. A poultry dealer in New York was indicted because he sold some chickens for less than the price fixed by the code but the Court found that he had a right to fix his own price. Only a few months ago a railroad was indicted, tried, convicted and heavily fined because it charged less than a published rate, notwithstanding there was doubt as to what the legal rate really was. There is a difference, of course, between a private citizen and a common carrier, but I ask you to bear in mind that under the law as it now stands the common carrier is subject to restrictions in its own price fixing that are even more drastic than those found so repugnant by private individuals. In effect, the rate-making power has, for all practical purposes, been transferred from the railroad that actually performs the service to a government bureau that is only incidentally responsible for the consequences of its acts. If you insist that railroads still have the right to originate rates, my answer is that that right is so encumbered with Commission-made precedents, and so involved with procedural processes that it is of little practical benefit. The suspension of the proposal of the Eastern roads for pick-up and delivery service is a case in point. Even with the Commission's co-operation, the delays incident to compliance with the rules for publication, etc., render quick changes of rates to meet competition quite impracticable.

Before leaving the Transportation Act may I call your attention to the provisions extending the authority of the Commission over extensions, abandonments and security issues, and railway consolidations, and clothing it with power to determine whether existing facilities are being operated "under honest, efficient and economical management." It is also significant that the Act again increased the membership of the Commission to eleven.

There have been several minor amendments to the Act since 1920, and one of major importance. The latter deserves special mention because it is about the only example of a desire on the part of Congress to relieve the railroads of an irksome obligation. I refer to the repeal of the recapture provision. Incorporated in the

Act originally to meet objections of those who were fearful the railroads might profit unduly from the plan of rate making proposed, it was found to be unworkable and, although sustained by the Supreme Court, was taken out of the law in 1933.

Let no one think, however, that the temper of Congress toward the railroads has changed. The banyan tree continues to spread. The Hoch-Smith Resolution in 1925, the Railway Labor Act in 1926, the Denison Act in 1928, a *new* Railway Labor Act in 1934, a Railroad Retirement Act in 1934, and—the Emergency Railroad Transportation Act of 1933.

Hoch-Smith Move Ends in Hopeless Complexity

Some day a man gifted in the use of astronomical figures will write the history of the investigations made by the Commission under the Hoch-Smith resolution. The investigations started in 1925 and covered thirteen major commodities. In fact, the undertaking involved the overhauling of the entire rate structure of the United States.

The most recent order in the grain case was rendered this month, but another hearing has been ordered, so the end is not yet. So far 204,730 pages of transcript of testimony have been written and 14,320 separate exhibits filed. The cost to the Western railroads alone of the class rate, grain and grain products and livestock cases aggregates \$2,000,000. This is the direct cash outlay and does not include the salaries and expenses of attorneys, statisticians, witnesses and others representing the railroads. What expense the state commissions, grain exchanges and shippers generally incurred will never be known. One grain terminal expended \$150,000 in the first phase of the inquiry into grain rates. I believe traffic men will concur in my conclusion that the rate structure of the country is now no more satisfactory to either shippers or railroads than it was before Congress imposed this wasteful and wholly unnecessary project upon them.

Notwithstanding the vast powers lodged in the Interstate Commerce Commission, under which it could and did make almost any kind of investigation, Congress solemnly concluded that still another federal agency should be created whose duty it should be to search for wasteful railroad practices and, having exposed them, to tell the managers what to do about it. Thus, the Federal Co-ordinator emerged and for three years, come next June, he has, at an expense of several millions of dollars, subjected railroad operations to a laboratory analysis, from which he concludes that savings of maybe a hundred million dollars annually might be realized. Practical railroad men disagree with his estimate of savings, but, conceding that the full amount might be conserved, it is a little disconcerting to discover that the additional cost of two measures enacted by the last Congress—Railroad Retirement and Security Acts—would by 1938, practically neutralize all of the savings he would have us make. I might add that the Act was apparently constructed on the theory of the mother who told her son he could learn to swim, but he must not go near the water. Notwithstanding eighty per cent of all anticipated savings were to come from reduction in labor, the law provides that the number of employees must not be reduced.

Congress Still Has Insatiable Curiosity

With all these facilities for investigation and inquisition into railroad affairs, Congress still has an insatiable curiosity. Under a resolution passed by the Senate a year ago, Senator Wheeler and a committee are pursuing a determined inquiry into the history of railroad financing and related matters, and only recently asked

for an additional \$100,000 to continue the investigation.

And the end is not yet. The banyan tree still spreads. At the last session of Congress 386 bills were introduced which directly or indirectly affected railroads. Had five of them passed the added annual cost to the railroads of the United States would have been \$1,200,000,000. The Wheeler-Crosser Bill now pending, with a good chance of passing, would "freeze" the number of employees now on the payrolls, and lodge in the Commission the duty to pass on *any* proposal of the railroads to reduce forces.

No reference has been made to the regulations imposed on the railroads by the states. There is only time to say that the flood of federal legislation is matched by the states. Forty-eight legislatures and 48 state commissions have an amazing capacity for production, and it has not been neglected.

No Swelling in Mr. Eastman's Left Leg

In an address at Detroit last month, Co-ordinator Eastman defended regulation as a proper function of government and presented the view that the railroads have benefited from it. In the course of his remarks, he says: "I do say that public regulation has not, in any such way as many think, prevented the free and untrammeled exercise by the railroads of initiative and enterprise." From the remainder of his remarks on this subject it is apparent that Mr. Eastman thinks of regulation largely in terms of the Interstate Commerce Act and disregards the great body of statutory law, largely dealing with railway labor. His complacent acceptance of the consequences of regulation reminds me of the reply of the patient to his doctor when the latter, after an examination, said: "You're doing fine. That swelling and pain in your left leg doesn't bother me a bit." "Well," snorted the patient, "if the pain and swelling were in *your* left leg it wouldn't bother me either."

Authority without responsibility has decided drawbacks. Responsibility may be both a restraint and an incentive. The man battling at first hand with a practical problem is much more certain to develop skill and wisdom in handling it, particularly when his investment and personal future hang on the outcome, than is the detached individual who gives advice from the sidelines.

The Strange Case of Mr. Babson's Cat

Roger Babson's family had a cat. Mr. Babson relates that he used to sit in his study overlooking the back yard and on occasion would hear a great commotion. Looking out, he would see the cat streaking for a tree with the dog from across the alley in hot pursuit. The cat, with her tail like a waving plume, would mount to safety in the tree, while the dog, after a few vain leaps, would retire to other business. Upon one occasion, however, he noticed a decided variation in the proceedings. The dog bounded across the alley as usual, but this time the cat didn't run, and when the dog saw her arched back and the look in her eye he suddenly decided that he had an important matter to look after elsewhere. What had happened? Same dog, same cat, same alley. But the cat had become the mother of kittens and was charged with responsibility. It does make a difference.

Regulation that restricts itself to the administration of the general rules for equity and fair play is one thing. Regulation that abandons the role of umpire to become a player is a very different thing. Woodrow Wilson must have been thinking of much the same thing when he said:

Regulation by Commission is not regulation by law, but control according to the discretion of governmental officials. Reg-

ulation by law is judicial by fixed and definite rule, whereas regulation by commission is an affair of business sense of the comprehension and thorough understanding of complex and various bodies of business. There is no logical stopping place between that and the actual conduct of business enterprises by the government.

Such methods of regulation, it may safely be predicted, will, sooner or later, be completely discredited by experience. Commissions in the future, as in the past, will reflect rather public opinion than business discretion. The only safe process, the only American process, the only effective process, is the regulation of transactions by the definite prohibitions of law, item by item, as experience discloses their character and their effects and the punishment of the particular individuals who engage in them. The acts of corporations themselves must be checked, not by futile and blundering attempts to dictate to each corporation how its business shall be conducted, but by bringing the officials directly to book who are responsible for forbidden or questionable transactions.

That was written in 1908, before the full effects of railroad regulation had developed. Does not the record I have just reviewed confirm the accuracy of Mr. Wilson's conclusion that there is no stopping place between detailed supervision by a bureau and "actual conduct of business enterprises by government?"

A Politician's Slight Error of 3995 Per Cent

Let us turn for a moment to the cost of regulation, both to government and to the railroads. Obviously, the complete figures are unobtainable because so many are buried in joint expenditures where separation is impossible. However, there is sufficient information to make a significant and arresting showing. Take valuation as an example. Senator La Follette, author of the legislation, optimistically assured his colleagues that the combined expense to government and railroads could not possibly exceed \$5,000,000. The actual expense from 1913, when the work started, to the first of this year, aggregates for the government, \$48,145,772, and for the railroads, \$152,078,590. The disparity between Senator La Follette's estimate of \$5,000,000 and the combined outlay of \$201,078,590 is a fair sample of the politician's foresight when he invades the field of business.

When railroad men complain of the burden of effort and expense involved in making reports to government agencies, it is customary for the latter to pooh-pooh the matter as of such minor importance as to call for no anxiety. The flood of questionnaires set loose by the Federal Co-ordinator and his staff gave shippers an idea of the trouble such requests can cause. The Bureau of Railway Economics made a survey to determine the number of reports required of the railroads by the various federal and state agencies for the year 1921. This disclosed a total of 2,908,816. A typical western railroad, after a careful study, found that it sustains a cost of \$25,000 a year for the compilation of such reports. It is manifest, therefore, that at least \$5,000,000 is expended annually by the railroads to supply the information demanded by the government.

Large Non-Productive Expenditures Required

In 1932 the Bureau of Railway Economics made another study to ascertain the amount of nonproductive investment and nonproductive current expenditures incurred by the railroads. This study is mentioned here because by far the larger part of such expenditures are induced by municipal, state or federal requirements. The total investment in nonproductive property for the five-year period 1927-1931 was \$223,866,627, while the nonproductive charges to operation and maintenance was \$212,871,438. In other words, that survey revealed that the railroads were required to make an annual outlay of

over \$42,000,000 for purposes which the Commission itself observed in the Fifteen Per Cent Case do not "increase traffic" or "save expense."

The Politician's Pals, the Labor Czars

The tender solicitude for railroad labor manifested during the past twenty years by federal and state legislators is a matter of common knowledge. So far has the consideration for railway employees gone that little discretion is left to management either as to wages or conditions of service. The preferred position which they enjoy was fittingly described by Congressman Crosser, of Ohio, for years a labor spokesman, when he recently appeared before the Ways and Means Committee of the House, in behalf of an employees' income tax bill, then pending. I quote Mr. Crosser:

Here is a group of men employed in a way in which no other group of men in the United States are employed. No other group of men in the United States are employed so advantageously. They have the protection of the safety appliance laws, with any number of regulations on the part of the Interstate Commerce Commission, and of other laws passed by the protection of Congress which no other group of employees enjoy.

They receive free transportation during all their lives. If they retire from the service, years after they leave the service they have free transportation on the railroads of the country.

The Railroad Labor Act is particularly beneficial. No one who has not studied that subject can fully appreciate the advantages. It guarantees continuity of service in a way that no other legislation does or can guarantee such continuity.

All of these considerations and others make railroad employees an especially benefited group, and therefore a proper group upon which to levy a tax.

I wish I could tell you what it has cost American railroads to place their employees in that enviable position. It represents a staggering sum. I saw the figures for one railroad the other day. Since the passage of the Adamson eight-hour law in 1916, that railroad has paid out over \$550,000,000 in increased wages and penalty payments as a result of various labor board decisions and arbitrations resulting therefrom. Is it any wonder that that railroad is in trusteeship? One would suppose that labor would be willing to rest on such laurels, but as I have already indicated, it is asking for additional legislation from Congress that, if secured, will bankrupt every railroad in the United States.

In 1930 the railway brotherhoods filed complaints with the Commission under the Boiler Inspection Act, in one asking that the railroads be required to equip all their locomotives with power reverse gears and in the other that all locomotives be equipped with automatic stokers. The Commission issued an order favorable to complainants in the first case, but upon appeal to the Supreme Court it was remanded for further hearings. Both cases are now before the Commission. If the railroads are required to install the power reverse gears it will entail an expense of \$12,000,000 and if the automatic stokers are ordered it will involve an expenditure of \$150,000,000.

Mr. Eastman, and the Pretty Penny He Is Costing

Nor is labor content with what it can secure from the federal government. The states were really the first to extend the generous hand and the cumulating exactions upon railroad revenues have reached alarming proportions. In one western state, for example, the operating expenses were increased several hundred thousand dollars a year by a law limiting trains to 70 cars. So-called "full" crew laws are numerous and labor organizations are vigilant to see that they are enforced, as the recent experience of the Chicago, Burlington and Quincy with its streamline trains well indicates.

At the very bottom of the depression, Congress passed

the Emergency Transportation Act, of 1933. As the word "emergency" suggests, it was intended to be a relief measure and to point the way to methods of economy that would greatly improve the financial condition of the railroads. The accomplishments have been very disappointing and the anticipated savings have not materialized. Complying with the provisions of the law and the numerous requirements of the Co-ordinator, however, has cost the railroads a pretty penny. The assessments against the railroads for maintenance of the Co-ordinator and his staff, made at a rate of \$1.50 per mile of road for the first year and at the rate of \$2.00 per mile of road for each of the succeeding years, have totaled approximately \$1,375,000. In addition the railroads have had to bear the cost of many investigations of which there were approximately 2,200 in Western Territory alone, the Chicago Terminal Study being one and costing about \$85,000. An estimate of this expense for Western roads up to October 31, 1934, was \$1,463,686. While the figures for the entire country are not available, it seems safe to say on basis of known cost and experience in the West that this adventure in regulation will cost the railroads between \$5,000,000 and \$6,000,000 by June next.

The steady increase in the cost of regulation is well illustrated by the growth of the expenditures for the maintenance of the Interstate Commerce Commission. In the first year of its organization in 1887, its budget was \$15,140. The next year it was \$97,868, and from that time forward it climbed steadily until in 1931 it reached a peak of \$8,854,043, and had 2,389 employees. The amount for 1935 dropped to \$5,573,019, and the estimate in the budget message for 1936 is \$7,246,550. It is interesting to note that the total for the 49 years is \$142,967,550. When to this is added the expenditures for the support of the various state commissions, for which I do not have the figures, it will be seen that the contribution of the taxpayer is no mean item.

What I have been able to assemble, more or less hastily, is only part of the story. It does not touch the cost of maintaining on each railroad statistical departments, traffic bureaus, and well staffed commerce sections. It contains no allowance for expenses for attendance at prolonged hearings, the printing of voluminous briefs and records, the participation in innumerable conferences relating to the filing of tariffs, compliance with accounting requirements and other technical matters. What is even more important, it makes no attempt to measure the effect of all this upon the morale of railroad management. In his Detroit speech already referred to, Co-ordinator Eastman asserts that "managements are tempted to shift responsibility to the Commission and hold it guilty of all their troubles, if it does not accede in every respect to their rate demands." I am sorry to have to admit that there is a measure of truth in that indictment. Perhaps the wonder is that they exhibit any independence at all. The steady accretion of power in federal and state bureaus has had its effect on the men who run the railroads and the industry suffers as a consequence. Relax the supervision and that condition will improve.

A Specific Program to Clean Out the Jungle

I have been reminded that criticism of excessive regulation serves but little purpose if it is unaccompanied by suggestions as to how it may be relaxed. There is merit in such a reminder. Therefore, I shall undertake to indicate some of the measures I think might be dispensed with. In so doing, I speak only for myself. At any rate, it is my opinion that the railroads would function to far better advantage, the public would be better served

and the cost of transportation would be reduced if the following changes in the law were brought about:

1. Permit the Emergency Transportation Act to expire by its own terms on June 20, 1936.

2. Repeal the Denison Act, which requires railroads, upon order of the Commission, to make joint rates with the government-owned barge lines and to turn over traffic to such water carriers, when it might more economically be handled by the railroad from whom the traffic is taken.

3. Modify the Interstate Commerce Act in the following particulars:

(a) Liberalize the Fourth Section as provided for in the Pettingill Bill, now pending in the Senate after passage through the House.

(b) Eliminate the provisions which empower the Commission, in the determination of a fair return or the division of joint rates, to take into consideration whether the carriers are operated under "honest, efficient and economical management." This is a direct invasion of the functions of management.

(c) Repeal the provisions with respect to certificates of public convenience and necessity whereby Commission approval is required for extensions, acquisitions and abandonments. The advent of intense competition by the new agencies will largely control these matters. The free play of economic forces can be trusted to prevent unwise and improvident construction.

(d) Modify the present unworkable provisions of the Act which require the Commission to promulgate a plan for consolidation of railroads. All compulsory features of the law should be removed and the carriers permitted to work out voluntary consolidations, subject to final approval by the Commission.

(e) Power of the Commission to suspend rates should be limited to those cases in which complainant can show that irrevocable injury is threatened. The growing practice, participated in by both shippers and carriers, of invoking the suspension powers of the Commission, and the frequency with which the latter grants such requests, or acts on its own motion, promotes interminable delays and increases the handicap under which railroads labor in meeting competition.

Other amendments might be cited, but these will suffice to indicate the direction in which I think we should proceed. If railroads are to meet the competition of water, motor and air transport—and even government officials insist that that is what they must do—then they must have greater freedom in two things—the initiation of rates and control of wages. We can be assured that if these, and other modifications of like import, are not effected, railroad transportation will be "goose-stepped" into government ownership.

Papa and Mama Should Let Their Boy Grow Up

Establishment of broad policies of general application is the natural function of a national authority. But railroad operation is a business of infinite detail. Action is rapid. It must be directed by men familiar with all the circumstances. Judgments, in most cases, should be made by those on the ground. Authority should be kept close to the field of operation. Remote control may work in radio, but it cannot be applied to railroad transportation. The road to improvement does not lie in the direction of further experimentation with paternalistic theories. We have already had too much of what has been cal'd "papa and mamma" government. The qualities of satisfactory service and successful operation are not the products of inquisitions or mandatory orders. They come from responsibility, the development of initiative and the stimulation of an *esprit de corps* in the organization.

America is a restless, ambitious multitude of 130,000,000 people scattered across the expanse of a great continent, and while living under widely divergent conditions, they speak a common language, cherish common ideals and are in a spiritual, as well as a political sense, a united people. They have unlimited capacity for further progress if they do not become so enmeshed in the

benevolent ministrations of a paternalistic government that they lose their courage in bewilderment and their vision in a vast confusion. The leadership which they now so greatly need will never emerge from a government bureau. It will come, as it always has, from the ranks of men whose natural talents have been whetted by conflict and whose ability has been tempered in the fires of experience.

Freight Car Loading

WASHINGTON, D. C.

REVENUE freight car loading in the week ended May 2 totaled 671,154 cars, an increase of 4,973 cars as compared with the week before and an increase of 102,227 cars, or 18 per cent, as compared with the corresponding week of last year. The principal increases over last year's figures were in miscellaneous freight and coal but all commodity classifications except ore showed an increase. Coal, grain, and forest products showed decreases as compared with the preceding week. The summary, as compiled by the Car Service Division of the Association of American Railroads, follows:

Revenue Freight Car Loading			
For Week Ended Saturday, May 2			
Districts	1936	1935	1934
Eastern	153,931	133,011	146,667
Allegheny	138,522	106,629	123,010
Pocahontas	47,205	35,410	43,758
Southern	97,658	84,837	87,748
Northwestern	84,811	79,578	74,018
Central Western	95,504	83,395	82,381
Southwestern	53,523	46,067	47,664
Total Western Districts	233,838	209,040	204,063
Total All Roads	671,154	568,927	605,246
Commodities			
Grain and Grain Products	32,666	25,602	27,091
Live Stock	15,181	14,087	16,752
Coal	119,567	84,294	112,133
Coke	7,655	5,054	6,853
Forest Products	32,164	27,334	24,998
Ore	17,629	20,161	9,851
Merchandise L.C.L.	162,600	161,204	166,485
Miscellaneous	283,692	231,191	241,083
May 2	671,154	568,927	605,246
April 25	666,181	558,936	609,704
April 18	642,657	611,141	591,705
April 11	622,138	586,568	579,981
April 4	613,867	545,456	559,070
Cumulative Total, 18 Weeks	11,123,211	10,375,945	10,510,874

Car Loading in Canada

Car loadings in Canada for the week ended May 2 increased from 43,196 cars in 1935 and 47,228 cars for the previous week to 47,262 cars, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
May 2, 1936	47,262	26,651
April 25, 1936	47,228	26,755
April 18, 1936	44,533	24,970
May 4, 1935	43,196	21,780
Cumulative Totals for Canada:		
May 2, 1936	76,861	423,607
May 4, 1935	768,551	411,626
May 5, 1934	743,560	423,830

THE ATLANTIC COAST LINE has recently launched a campaign to keep before its employees reminders of the necessity for courtesy in all dealings with patrons. Among the reminders being employed are "Courtesy Always" and "Courtesy is Genuine Politeness" headings on telephone memorandum pads, and editorials, articles, and fillers in the Atlantic Coast Line News—the latter reiterating the slogan "Service is Courtesy in Action."

Second "Railroad Week" Celebration Planned for July 13-18

Sales meeting held at Chicago first step towards adoption
of method of educating sales forces

WESTERN railroads will again celebrate "railroad week," the week decided upon being that between July 13 and 18. The decision to observe the second annual railroad week was announced by H. G. Taylor, chairman of the Western Association of Railway Executives, at Chicago on May 11, before a meeting of 1,100 railroad passenger representatives who attended a dinner and show sponsored by the western railroads. This gathering, the first of its kind, is a step towards the adoption by western railroads of a well-defined method of educating their sales forces. While the meeting was sponsored by the western lines, passenger solicitors of eastern railroads with headquarters in Chicago also attended. The program of the sales meeting included an address by Mr. Taylor on salesmanship, a two-act skit contrasting conduct in a ticket office of years ago with that in a modern ticket office, and the showing of sound-slide films used to educate sales employees in other industries. These pictures were shown to determine their value in the education of employees in the sale of railroad passenger service.

Mr. Taylor said in part: "The salesman's job is to make people want what they need and when the transaction is completed, everybody benefits. New products must be 'introduced,' which is merely a modern way of saying that the salesman must educate the public to their advantages. Dr. Kettering, head of General Motors Research Laboratories, says that the chief function of a research engineer is to keep people dissatisfied with what they have. If I get what he means, it is that progress is not possible if the tastes, as well as the needs, of people remain static. But, after the research engineer has perfected his product, industry must send for the salesman to create a demand for it.

Salesmanship, therefore, is recognized as an essential element in industrial progress. The theorist in social economics regards him as an unnecessary middleman, but experience has demonstrated that so long as human nature remains as it is, the salesman will constitute a vital part in the program of commerce.

"The name 'ticket agent' is a misnomer, and your job ought to be dignified with a better title. You do not sell tickets any more than a real estate agent sells deeds. The ticket is merely evidence of a title to something more valuable.

"The man about whom I would boast tonight is not a mere ticket seller, he is an enthusiast. He realizes that he sits at the gate that admits to the open road leading to great adventures. He is a transportation advisor, a counselor in travel, a partner in the joys and sorrows of thousands of people; his opportunity for service is unlimited in its possibilities. He doesn't sell a ticket, he sells sunshine, fresh air and great open spaces—Grand Canyons, snowy peaks and dude ranches.

"One does not have to be an expert in the technique of that profession, however, to know that the first requisite is to have something to sell. And when it comes

to that, the seller of railroad passenger service is in a particularly favorable position. He has the finest product in industry today. Railroads have set the pace in economic recovery. They offer a tray full of merchandise unmatched in any industry. The research engineer has been breaking records in the railroad industry so that today the salesman has a double attraction to offer the prospective traveler. As I have already pointed out, he has places to go and reasons for traveling that constitute fascinating attractions if properly presented. In addition, he can offer conveniences and comforts that set new standards in transportation.

Railroad Week

"Western railroads will again celebrate 'Railroad Week' the dates being July 13 to 18. The outstanding success of a similar effort last year, when nearly 400 towns and cities participated, prompted a general request for a repetition. It is expected that at least 500 towns will put on programs this year. Nothing in railroad history so stimulated public interest in steam carriers or proved so helpful to the morale of railroad personnel. The celebrations afforded an opportunity for a public expression of appreciation for the indispensable place railroads occupy in American life.

"Today representatives from Western railroads met in this city to formulate plans for the big event and the interest and enthusiasm displayed augurs well for an even greater success than was realized last year.

"There will be proclamations by governors and mayors, decorations of railroad property and business houses, unique publicity, handcar derbies, train calling contests, Red Cap races, rail-walking contests, blowing of locomotive whistles, visits to railroad shops and round-houses, exhibits of both new and old railroad equipment, picnics and outings, gala street dances, popularity contests, colorful parades, speeches before luncheon and civic clubs. These and many other forms of entertainment will constitute one of the most eventful weeks in western railroad history.

"In a country as big as ours the real problem consists in disseminating essential information so that there may be a mutual understanding of common interests. Railroad Week is the medium through which such an understanding can be promoted and its high points dramatized. The great success of the celebration last year demonstrated its value for that purpose. The ghosts of old prejudices and the misunderstandings of former days were put to flight. The value, therefore, of such a celebration as a builder of good will and better feeling cannot be exaggerated.

"Yes, we are going to put on a show. We propose to celebrate a hundred years of progress in transportation. The spirit, courage and vision of pioneer railroad builders lives again today. In the hearts and minds of 720,000 workers who make up the human side of Western railroads and their allied industries, this spirit is still active."

Wheeler "Filibustering" Against Pettengill Bill

WASHINGTON, D. C.

HEARINGS on the Pettengill bill to repeal the long-and-short-haul clause of section 4 of the interstate commerce act, begun before the Senate committee on interstate commerce on May 11 after several postponements, immediately developed into something very much like a one-man filibuster by Chairman Wheeler of the committee. Senator Wheeler is opposed to the bill, which has been passed by the House, and as it is reported that a majority of the Senate would vote for the bill if it got before them, the longer it can be kept in committee the less chance there is for its passage before Congress adjourns. After setting aside approximately a week for hearing proponents of the bill Senator Wheeler spent so much time in asking questions and arguing with the railroad witnesses that in a two-hour session Joseph G. Kerr, assistant to the traffic vice-president of the Association of American Railroads, had succeeded in reading only 7 pages of a 26-page statement explaining why the railroads desire the bill. After making similar progress on the following day when Mr. Kerr asked to put the rest of his statement in the record without reading Senator Wheeler said he could have all the time he wanted and that he wanted to ask further questions after it was finished.

Interference of the long-and-short-haul restrictions of the present law with prompt adjustment of railroad rates to prevent loss of traffic to competitive carriers, together with confusion as to what the railroads may and may not do in connection with such rate adjustments, were ascribed by representatives of the carriers as principal reasons for passage of the Pettengill bill.

The average elapsed time between the filing of applications for rate relief in fourth section cases, and decision by the Interstate Commerce Commission in typical cases in 1935 was shown to have been 12.4 months, in the statement presented by Mr. Kerr. This statement, which excluded cases of minor importance, covered 43 cases, in which the delay ranged from three months, at the least, to 66 months in one instance. In 21 instances the delay was ten or more months.

As illustrative of the situation of the railroads with respect to uncertainty as to the bases on which long-and-short-haul applications will be treated under the present law, Mr. Kerr cited two recent decisions by the same division of the commission, one week apart, directly in conflict with each other in application, although he said the essential facts were practically the same in each instance.

"In approaching this problem," Mr. Kerr said, "I desire to emphasize the fact that we are asking for fair treatment and for an opportunity to conduct our own business, which is transportation, on a business-like basis, and somewhat more free from the rate strait-jacket in which we find ourselves and which in practical effect and application largely eliminates us from any real opportunity to handle traffic between points which are served by or in connection with water carriers and which, also, in large measure, prevents us from handling traffic from interior manufacturing points to points on the navigable waters, and which also prevents us from effectively meeting, in many cases, motor truck, pipe-line, and other competition.

"While the words and the provisions may sound very simple and one unused to their application might think the railroads would obtain thereunder substantial

equality of opportunity to compete on reasonable terms with their competitors, the fact is that the clause has been drastically administered; in many instances it has been found impossible to obtain relief from its provisions; in others, the relief granted is not sufficient to protect the situation and is, therefore, practically worthless; in still others the conditions under which it is granted are very difficult or impossible to comply with.

"In advocating the enactment of this bill proposing the repeal of the long-and-short-haul clause of the fourth section of the interstate commerce act, we do so because of the sincere belief that the railroads are entitled to share in the traffic moving to, from, or between points located on or adjacent to navigable waters and other competitive points and to bring about a condition whereby there is some reasonable opportunity for manufacturers or producers at inland points served by the railroads to market their products and move them by railroad to water-competitive markets in competition with manufacturers or producers who have the benefit of all-water transportation, and that the railroads shall be in position to determine for themselves whether the competitive rates they seek to establish yield some measure of profit so long as the intermediate points are not charged unreasonably high rates and are not unjustly discriminated against.

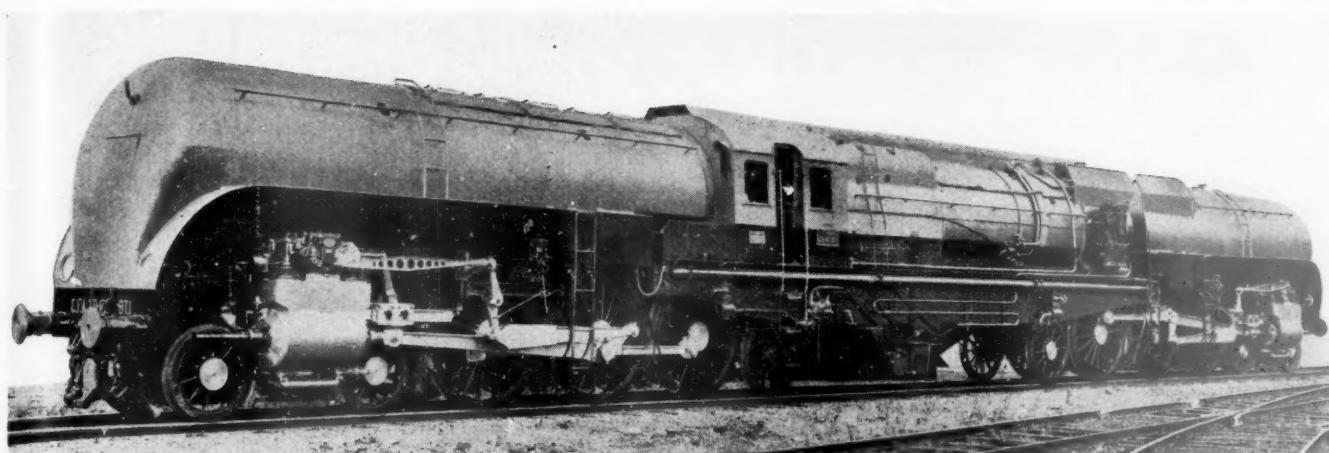
"While under the present wording of the fourth section the commission is given authority in special cases to permit the railroads to charge less for a longer haul than for a shorter haul over the same route, actually section 4 is so drastically administered as to almost eliminate, in a practical sense, the railroads from any reasonable opportunity to share in the movement of traffic between points served by water carriers.

"What we ask is that the long-and-short-haul clause should be eliminated entirely, thus leaving to the carrier the primary duty of determining and making effective whatever rates are necessary to meet and to fairly reflect the circumstances and conditions surrounding the movement of the particular traffic, and without the necessity of waiting until our competitors have virtually stripped the traffic from the rails and also from the producers in the land-locked interior, largely dependent upon railroad transportation, before we can make an application to the commission, and then to spend much time, expense and labor preparing fourth section applications, participating in elaborate formal hearings in relation thereto, and wait months and in important instances years before we can get a decision as to what we can or what we cannot do."

R. V. Fletcher, vice-president and general counsel of the Association of American Railroads, opened the railroad presentation. He made a short statement as to the necessity that the railroads be placed in the same situation with respect to rate changes involving departure from the present long-and-short-haul rule, if they are to meet competition of other carriers with any degree of success, that they are with respect to other rate changes. Beyond brief discussion of the legal principles involved in the proposed changes in the law, and explanation of the fact that it would in no wise abridge the present powers of the Interstate Commerce Commission to fix both maximum and minimum rail rates, and to suspend any rates initiated by the railroads, he did not attempt to discuss in detail the effects of the present law on the railroads.

He was several times interrupted by questions from Senator Wheeler and Senator Couzens. Senator Wheeler's questions were principally directed to questions as to whether the commission has power under the present law to do what the railroads desire. Judge

(Continued on page 804)



High-Speed Beyer-Garratt Locomotive for Service on the Algerian Railways

High-Speed Articulated Locomotives for Algeria

Success of trial passenger locomotive of Beyer-Garratt type leads to purchase of 12 additional units

AN order of 12 Beyer-Garratt locomotives was delivered to the Algerian Railways early this year for express passenger service on two railway lines, both of which combine long stretches of level or easy rolling grades, with extensive mountain grades, some of which run as high as 2.6 per cent with 5-deg. 50-min. curves. The order for these locomotives was the result of the successful performance of a similar locomotive with essentially the same dimensions which was built in 1932 and, after extensive trials on the P.L.M. Lines in France, placed in service on the Algiers-Oran line of the P.L.M. Algerian system in 1933. All 13 locomotives were built by the Societe Franco-Belge de Materiel des Chemins de Fer to the designs of Beyer, Peacock & Co., Ltd., England.

A description and an account of the performance of the original Beyer-Garratt locomotive appeared in the *Railway Age* of January 20, 1934, page 73. This locomotive as originally built was equipped with Walschaert valve motion and had 71-in. driving wheels, the largest ever employed on this type of locomotive up to that time. It gave an excellent account of itself on grades because of its relatively high tractive capacity and proved to be an exceptionally free running locomotive on the low-grade portions of the line where it frequently operated at speeds over 70 m.p.h. and actually reached a speed of approximately 82 m.p.h.

Since the first locomotive was placed in service on the Algerian Railways it has been subjected to a number of modifications. First, the locomotive was equipped with an A.C.F.I. feedwater heater. The front end was then altered to include a double smokestack placed transversely of the smokebox and variable exhaust nozzles. Finally, the Walschaert valve motion and piston valves were replaced by the Cossart system of poppet-valve steam distribution with electric control of the reversing gear. The locomotives include all of these features.

Like the first locomotive, the 12 new locomotives have cylinders 19½ in. in diameter by 26-in. stroke and driving wheels 71 in. in diameter. The boiler pressure, however, has been increased from 228 lb. to 284 lb. The differences in heating surfaces are not large, but they are slightly less in the new locomotives than in the earlier one. On the other hand, the grate area has been increased about 6½ per cent. The boiler plates are of 2.5 to 3 per cent nickel steel. Like the former locomotive, the new locomotives are fitted with the Superheater Company's superheater and a multiple type throttle built into the header. Designed to burn a mixture of bituminous coal and briquettes, the coal space is fitted with a steam-operated coal pusher to assist the fireman by moving the coal forward as required.

The new locomotives have been given a partially streamline appearance by the contours of the two tanks which, in cross-section, have been made to conform to the diameter of the boiler.

The outstanding change in the new locomotives as compared with the first locomotive as originally built is the Cossart system of steam distribution which is the product of Corpet Louvet et Cie of Paris. This consists of cam-operated vertical poppet valves which are driven from a return crank on the main crank pin. These valves were adopted because the trials of the first locomotive indicated that the piston valves driven by the Walschaert gear tended to exert a retarding influence on the locomotive at high speed. With the poppet valves the locomotive has been operated at cut-offs of less than 7 per cent for as much as one third of a trip with improved economy. The tests after the new valves had been installed are said to have shown superior economy and operating characteristics at cut-offs of less than 20 per cent, with equal economy at cut-offs from 20 to 30 per cent, but that beyond 30 per cent the Walschaert gear is somewhat more economical. One of the notable

features of the modified locomotive is its free drifting for which the liberal by-pass provided by the valves is responsible.

The electrical system of cut-off control was developed by the builders of the locomotive. A motor-operated longitudinal shaft is mounted on the boiler cradle. This is extended to the valve gears on each unit through suitable universal couplings. A small lever in the cab controls the operation of the motor to produce accurately

Dimensions and Proportions of the Beyer-Garratt Passenger Locomotive

	First locomotive	New locomotives
Railroad Builder	P.L.M. (Algeria) Societe Franco-Belge de Material des Chemins de Fer	P.L.M. (Algeria)
Year built	1932	1936
Type	4-6-2 plus 2-6-4	4-6-2 plus 2-6-4
Service	Passenger	Passenger
Rated maximum tractive force	47,400	58,102
Cylinders, (4), diameter and stroke, in.	19 1/4 by 26	19 1/4 by 26
Valve gear, type	Walschaert	Cossart
Weight on drivers, lb.	238,200	244,710
Weight, total engine, lb.	443,200	476,194
Maximum axle load, lb.	39,700	40,785
Wheel bases:		
Driving, ft.-in.	12-10 3/4	12-10 5/16
Rigid, ft.-in.	12-10 3/4	12-10 5/16
Total, single engine, ft.-in.	31-0	31-0
Total locomotive, ft.-in.	87-0	87-2 1/2
Wheels, diameter outside tires:		
Driving, in.	71	71
Outer truck (four wheels), in.	39 3/4	39 3/4
Inner truck (two wheels), in.	47 1/4	47 1/4
Boilers:		
Type	Belpaire	Belpaire
Steam pressure, lb.	228	284
Fuel, kind		
Diameter, smallest ring, inside, ft.-in.	6-9	6-9
Tubes, number and diameter, in.	232-2	225-2
Flues, number and diameter, in.	50-5 1/4	48-5 4/3
Length over tube sheets, ft.-in.	15-0	14-6 1/2
Grate area, sq. ft.	54.6	58.1
Heating surfaces:		
Firebox (inside), sq. ft.	238	220
Tubes and flues, sq. ft.	2,849	2,575
Total evaporative, sq. ft.	3,087	2,795
Superheater (outside), sq. ft.	743	975
Comb. evap. and superheat, sq. ft.	3,830	3,770
Water capacity, gal.	6,600	7,956
Fuel capacity, tons	7 3/4	12.2

a fine adjustment of the cut-off. The locomotive is equipped with an additional turbo generator to provide the current for operating the cut-off control system.

The locomotive controls are duplicated in the diagonally opposite corners of the cab to permit operating with either the cab end or stack end first. In regular service the locomotives are only turned occasionally, as may be required to equalize tire wear.

The locomotives possess a remarkable range of adaptability. The first locomotive has handled trains of 871 tons on 2 per cent grades at speeds of 9.3 m.p.h. One of the new locomotives on a trial trip after delivery is said to have reached a speed of 75 m.p.h. with a cut-off of 4 per cent, and with a light throttle, drifting, to have maintained over 60 m.p.h. on level track for a distance of over three miles. The riding of the cab around sharp curves is said to be unusually comfortable. No unfavorable track effects have developed and the maintenance of the locomotives themselves is said to be lower than the equivalent power in the ordinary type of locomotive displaced.

A 40-PAGE BOOKLET describing Virginia's historic shrines, natural beauties and vacation resorts has recently been issued by the Norfolk & Western. The booklet, 20,000 copies of which are being distributed, is entitled "The Land of Romance" and includes several chapters and a two-page map in colors with sketches illustrating points of interest along the N. & W.

Wheeler "Filibustering"

Against Pettengill Bill

(Continued from page 802)

Fletcher replied that it had not been found practicable by the commission, under the present law, to act as promptly as effective competitive action by the railroads necessitates.

Senator Dieterich, of Illinois, and Chairman Wheeler questioned Mr. Kerr repeatedly, the chairman making inquiry particularly as to the effect of the proposed legislation on relative rates in intermountain and Pacific coast territory, and as to methods of determining the cost to the railroads of transporting particular traffic. Senator Wheeler stated that he does not object to repeal of the so-called circuitry clause of the fourth section which the Interstate Commerce Commission has reported it regards as unnecessary. Senator Dieterich and Chairman Wheeler both inquired as to whether regulation of water carriers would meet the needs of the railroads, the railroad representatives replying that it would not for the reason that the long-and-short-haul restrictions are not applied to motor carriers, that it is not proposed in any pending legislation to apply them to water carriers, and that in neither case would it be practicable to apply such restrictions to their operations, as they are applied to railroads.

Both Senators indicated that they were in favor of regulation of other forms of transportation but Senator Wheeler said that the water lines objected to regulation because they were afraid the commission was "railroad-minded." Senator Dieterich said he did not see why the railroads should not be permitted to meet their competition where they see that they can do so because the government is spending money to provide a right-of-way for their competitors. Senator Wheeler asked if the situation complained of by the railroads could not be met by inserting into the fourth section a provision requiring the commission to reach its decision in seven months but Mr. Kerr said that would still place a burden on the railroads and delay most applications for seven months. In reply to Senator Wheeler's questions which assumed that the shipper at the interior point would be discriminated against and have to bear the expense of making a case before the commission both Mr. Kerr and Mr. Fletcher emphasized that the railroads would not be reducing rates for the longer haul lines unless the discrimination had already been created by a competitor.

Senator Wheeler attempted at various times to secure admissions from Mr. Kerr that the railroads would make money with scales of rates generally lower everywhere than those now in effect, but Mr. Kerr denied that the general rate level, as reflected by average freight revenues per ton mile, is higher than it was ten or more years ago. He conceded that specific rates in some instances are higher, but insisted that the average of all rates as applied to volume of traffic moving at particular times is the measure through which it must be determined whether a railroad is making money.

Senator Dieterich pointed out that results in recent years do not indicate that railroads are making money, but rather that they are having difficulty in avoiding bankruptcy, and he added, "even if they were making money, I do not understand that it is yet a crime for even a railroad to make money."

The hearings were expected to continue through the remainder of the week, and it was expected that the representatives of railroad labor organizations will appear in support of the measure.

Forty Railroads Report on Stores Expense

Survey shows reduction in unit costs of handling company material with increased material consumption

In response to requests from readers to review the controversial and somewhat delicate subject of stores expense by bringing up to date the figures reported in previous summaries,* the *Railway Age* has obtained data from 42 railroads for 1933, 1934 and 1935, which show continuing variations in average costs of handling materials through railway supply departments, but substantial reductions since the years when railway consumption was lowest. Some railroads declined to disclose their figures, contending that comparisons are valueless or unfair until accounting procedure becomes more uniform. The Federal Co-ordinator and the Purchases and Stores Section, A.A.R., are said to have stores expenses under consideration at present, and it has been reported that accounting forces of the Interstate Commerce Commission in an undetermined number of instances have been checking observance and interpretations of I.C.C. rules governing stores expenses and have caused changes to be made in the methods of figuring the costs on some roads. In this, as in previous reviews, the reported figures are presented without drawing conclusions one way or another as to their relative value.

Costs reported by 40 co-operating roads for 1935 varied from \$3.41 per \$100 of material disbursed to \$14.20, and averaged \$6.65, as compared with \$6.70 in 1934, and \$7.59 in 1933. Figures for the 11-year period from 1925 to 1935, reported by 19 roads, gave an average stores expense of \$6.70 in 1935, contrasted with \$6.90 in 1934, \$7.65 in 1933, \$7.64 in 1932, \$6.94 in 1931, \$5.76 in 1930, \$5.52 in 1929, and \$5.78 in 1925. Since 1933, when unit costs were highest, the average of reported costs declined 12 per cent. Although the average in 1935 was still 22 per cent above that in 1929 when the rate of consumption of material was more than 50 per cent higher than at present.

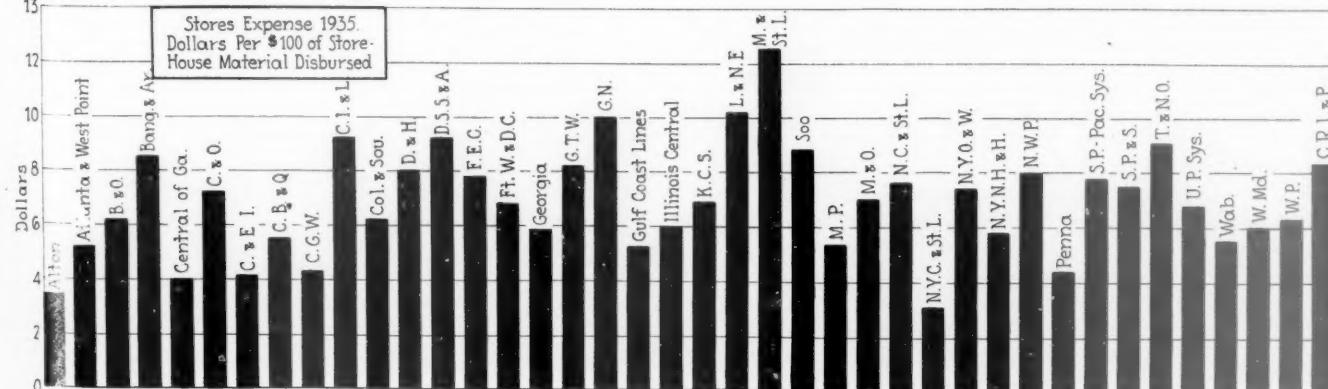
As explained in previous summaries which detailed the items of cost in the stores expense of different roads, reported figures seldom include, as is often supposed,

the cost of all supply department operations. Subject to much variation, the general practice is to exclude lumber inspection, scrap handling, reclamation, equipment dismantling, etc., and also special work performed by the stores for other departments, the cost of which is charged directly to the material or primary account affected. On the other hand, various costs incurred by other departments in connection with handling material, such as accounting expense, switching and labor, are included.

While the absence of inflexible and universally applied rules governing the costs which should be and should not be included in stores expenses causes variations in stores expense of different roads, it does not follow that roads reporting larger unit costs of handling include more activities in their figures than those reporting lower costs. The values which different roads give to large quantities of salvage, repaired or reclaimed materials which are returned to stock and re-issued, are factors to be considered. These values range from nothing to the full price of newly purchased material. When these irregularities are minimized, if ever, differences in the figures of different roads, it appears, will consist largely of differences in the rates paid for labor, differences in handling facilities, differences in the prices paid for material, and differences in the degree to which the cost of handling materials is or can be separated from other costs, etc.

Recent changes reported by railroads in their methods of computing stores expense are few and are confined chiefly to changes in the pricing of old materials. Since 1934, handling costs on the Chicago Great Western exclude certain accounting department salaries which are now in general office expense, in accordance with I.C.C. instructions. The practice on this road is to charge 1 per cent on rail and ties and 6 per cent on other material during the year, and adjust to actual charges at the close of the year. Prior to 1934, 2 per cent was charged to rail. In this accounting, only expenses at the central store are considered, the cost of handling at other stores being pro-rated monthly to expenses on the basis of the small amount of material used at each location.

* September 23, 1933, and May 19, 1934.



Stores Expenses Reported by 40 Roads in 1935—A Comparison of Costs Added to Material Issued From Storehouses to Cover Cost of Purchasing, Handling and Other Supply Work Not Otherwise Accounted For

tion. Average costs in 1935, based on the total materials used, excluding coal, ice, commissary and stationery supplies, were \$0.67 for rail and ties and \$4.38 for other material.

The figures reported by the Atlanta & West Point and the Georgia were intended to show the actual costs of handling materials and were obtained by dividing the total stores expense by the total issues from stock, including materials charged to store orders and scrap sold. They are, therefore, lower than the average "Stores Expense" which is not pro-rated over store orders or scrap sold.

Items charged to stores expenses on the Illinois Central, in addition to those reported earlier in these columns, include the cost of handling stationery, the cost

with the exception of major items, such as cylinders, ties, superheater units, etc., that road's accounting for second-hand material is conducted on a fixed charge basis. Although not taken into stock and accounted for as used in the conventional manner, differences in value developed at inventory time are adjusted by debits and credits to operating expenses. As a result, the reported stores figures are larger per \$100 of material disbursed than would be the case if the value of the scrap handled were included in the disbursements.

The Delaware, Lackawanna & Western is now allowing one-half of the current price for all secondhand usable and repaired materials returned to stock, and reissuing it at the same value.

On the Texas & New Orleans, which was not included in earlier summaries, secondhand material is handled through the stores at one-half the value of new material, the cost of any repairing being charged to operating expenses each month. Contrary to practices on some roads, this road includes in stores expense the store department's cost of delivering materials to shop forces.

Since January, 1935, the Western Pacific has been

Stores Expense Per \$100 of Material Issued

	1933	1934	1935
Alton	\$3.82	\$3.88	\$3.41
Atlanta & West Point	6.96	6.01	5.17
Baltimore & Ohio	6.50	5.51	6.12
Bangor & Aroostook	8.50	8.50	8.50
Central of Georgia	4.00	4.00	4.00
Chesapeake & Ohio	7.62	6.15	6.60
Chicago & Eastern Illinois	5.34	4.02	4.02
Chicago, Burl. & Quincy	6.16	5.97	5.75
Chicago Great Western	5.59	4.03	4.38
Chicago, Ind. & Louisville	8.30	8.39	9.12
Chicago, R. I. & Pacific	9.36	8.48	8.25
Colorado & Southern	9.03	7.24	6.20
Delaware & Hudson	10.29	8.72	8.01
Duluth, S. S. & Atlantic	10.30	8.50	9.20
Florida East Coast	8.60	7.61	7.72
Ft. Worth & Denver City	9.57	8.45	6.75
Georgia	5.22	4.39	4.97
Grand Trunk Western	12.75	10.00	8.10
Great Northern	10.00	10.00	10.90
Gulf Coast Lines	5.63	4.81	5.19
Illinois Central	6.75	5.33	6.00
Kansas City Southern	8.53	8.39	6.90
Lehigh & New England	7.46	8.13	10.10
Minneapolis & St. Louis	12.48
M., St. Paul & S. S. M.	10.00	9.00	8.80
Missouri Pacific	5.68	5.20	5.31
Mobile & Ohio	9.99	8.71	6.98
Nashville, Chattanooga & St. Louis	5.94	6.55	7.62
New York, Chicago & St. Louis	4.25	2.94	2.99
New York, Ontario & Western	8.55	7.52	7.59
New York, New Haven & Hartford	6.91	5.59	5.94
Northwestern Pacific	10.00	7.60	8.00
Pennsylvania	3.98	3.98	4.36
San Diego & Arizona Eastern	...	17.00	14.20
Southern Pacific, Pac. Lines	9.00	7.60	7.80
Spokane, Port. & Seattle	8.00	7.75	7.50
Texas & New Orleans	10.00	10.00	9.00
Union Pacific	8.01	7.39	6.75
Wabash	6.48	5.32	5.55
Western Maryland	7.42	5.75	6.00
Western Pacific	7.35	6.17	6.25
A Western Railroad	12.75	11.37	8.04
Average—40 roads	7.76	6.87	6.72

of trucking company material in connection with storehouse work, the cost of operating oil houses, general office expenses incurred in connection with supply department work, the cost of roadway and shop labor incurred in loading material at storehouses or distributing points, and the pro-rated cost of switching where an engine is assigned to shop and storehouse work. Selling scrap is excluded. Illinois Central practice is further clarified with the statement that secondhand material is credited to sources or carried in the stock at current scrap prices, while scrap materials are carried at scrap prices plus the labor for reconditioning, with the exception of rail which is credited at \$10 per ton if less than 85-lb. rail, and at \$24 per ton if more than 85-lb. Where it is impossible to apply scrap values, an arbitrary price of one-fourth the value of new material is used. No allowance is made for old lumber or for cross or switch ties.

Stores expense on the New York, New Haven & Hartford includes, in addition to the items mentioned earlier, the cost of handling shop scrap, operating scrap yards, operating oil houses, selling scrap, general office expense, and the cost of dismantling equipment.

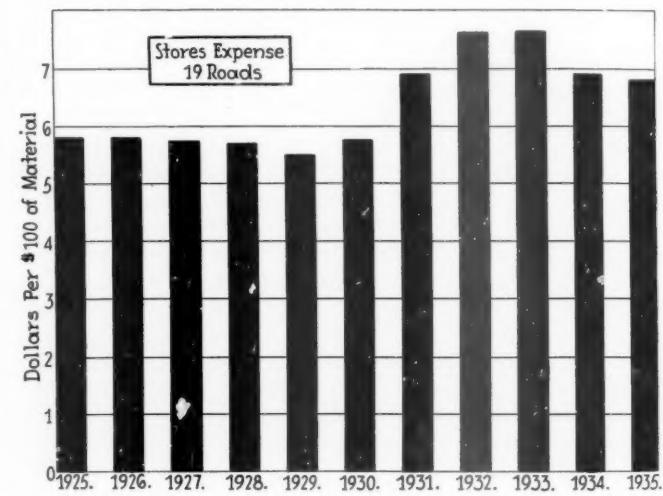
A report from the Delaware & Hudson explains that

Stores Expenses for Eleven Years—A Comparison of the Costs Added by 19 Railroads to Material Issued from Storehouses to Cover Handling

handling reconditioned material through the stores account at half the price of new material instead of the full price previously used.

Based on available information, the value given to secondhand material for various roads, compared to the value of new material, is approximately as shown in the table. Of 34 roads for which more or less complete information is available, 8 roads follow the general practice of charging out all secondhand repaired materials at the full price of new materials, 19 charge from 15 to 65 per cent of the new value, and 5 make such material available to users free of charge or at scrap prices. This does not include the New York Central which is understood, in general, to make good secondhand material available to users free of charge.

Included among information recently made available is the statement showing the principal items used in computing stores expense on the Chesapeake & Ohio. The work performed by the purchasing and stores forces, chargeable to stores expense, embraces pricing and vouchering, accounting for issues, handling stationery, trucking, oil house operations and general office expense. Work performed by other departments and charged to stores expense includes lumber inspection, certain shop labor and switch engine expense. The purchasing and



stores organization also performs work not chargeable to stores expense, chiefly the handling of shop scrap, delivery material to shops and operating scrap yards. Testing materials, fuel and tie inspection, handling ties and rail and roadway scrap, clearing grounds, operating reclamation and oil renovating plants, and equipment dis-

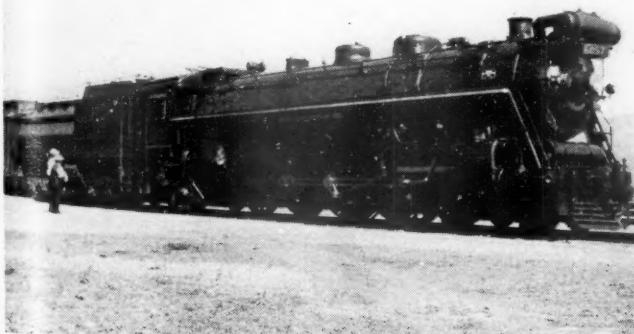
Value Given Secondhand Materials Compared to Prices of New Materials

A., T. & S. F. B. & O.	100 per cent, except boilers and heavy machinery. Scrap value plus repairs, except engine and caboose supplies.
C. N.	50 per cent on large, none on small items; rails at \$8, \$10 and \$25.
C. of Ga.	65 per cent on most items; lumber 50 per cent; some track items scrap value; tie plates, \$0.15; good rail, full value.
C. & O. C. & E. I. C. & N. W. C. & W. I. C. B. & Q. C. G. W.	50 per cent. Rail, \$25. 60 per cent. 60 per cent; rail and fastenings 80 per cent. 60 per cent plus repairs. 100 per cent; rail and fastenings, 60 per cent. 60 per cent if good, otherwise 25 per cent plus repairs.
C. & S. D. & H. D., L. & W. E. J. & E.	100 per cent; rail and fastenings, 60 per cent. 67 per cent if good, otherwise cost of repairs. 50 per cent. 50 per cent; rail, 53.5 per cent; crossties, 31.4 per cent; switch ties, 45.1 per cent; lumber, 20 per cent; frogs and switches, 35 per cent; fastenings, 55.5 per cent; cast wheels, 50 per cent; steel wheels, 70 per cent; axles, 60 per cent; air brake fittings, 100 per cent.
G. N. I. C.	50 per cent; track material, 75 per cent. Scrap value plus repairs; rail, \$8, \$10 and \$25; lumber and ties, none.
K. C. S. L. & H. L. & N. E. L. & N.	Scrap value, except motors and machinery. 25 to 75 per cent plus repairs. 60 per cent; repaired material, 100 per cent. 100 per cent; rail, lumber, wheels and axles, special prices.
M. P. N. Y., N. H. & H. N. & W. N. W. P. Pennsylvania	25 per cent. 50 per cent. No value. Reclaimed materials, 100 per cent. 50 per cent. 100 per cent. Wheels, \$37 to \$140; rail, \$18; frogs and switches, \$12; switch points, \$5; bridge, \$10 per ton; rail joints, \$0.60 to \$1.25 per pair; tie plates, \$0.10 each; rail anchors, \$0.05 each; poles and piling, \$0.05 per ft.; timbers, \$20 MBM; crossties, \$0.50.
P. M.	Good material based on service life. Repaired material, scrap value plus repairs. 100 per cent.
St. L.-S. F. S. P. T. & N. O. U. P. Wabash	50 per cent, repairs excluded. 50 per cent, repairs excluded. Scrap value. 100 per cent. Rail, 60 per cent; timber and lumber, loose wheels, flues, axles, 50 per cent less repairs; mounted wheels at old prices. 50 per cent; repaired, 77 per cent. 50 per cent.
W. Md. W. P. W. & L. E.	100 per cent. Rail, bridges and machinery appraised.

mantling are performed by departments other than the purchasing and stores organization on the Chesapeake & Ohio, and the cost of this work is charged direct to the materials or primary account concerned.

For further details, readers are referred to the previous summaries presented in these columns.

* * *



Canadian National Locomotive No. 6057 Ready to Leave Jasper, Alta., with the Westbound "Continental Limited"

Communications . . .

The "Subiaco Case" and the Proposed Routing Bill

TO THE EDITOR:

ST. LOUIS, Mo.

In my judgment the article by Thomas F. Woodlock of the *Wall Street Journal*, in the *Railway Age* of April 11, p. 607, referring to an "innocent little bill," Senate No. 1636, the proposed "Routing Bill," leaves an incorrect impression upon the minds of your many readers. I, as vice president of the Fort Smith, Subiaco & Rock Island, initiated the complaint and the exhibits, and gave all of the testimony. Since then I have followed the case to the Supreme Court.

Contrary to the statement contained in the article, there is not involved, as I see it, a Peter and Paul proposition as Mr. Woodlock contends. In the final analysis, this bill gives the Interstate Commerce Commission a free hand in determining what through rates are in the public interest. I think it is eminently qualified to perform this duty, and further feel that the public interest requires that it be given such authority. The Commission, in many of its decisions, has said that in view of the Supreme Court's ruling it no longer has power to require the establishment of through rates which will short haul any carrier, regardless of the extent to which such route may be in the public interest. I submit that there are innumerable instances in which it would be found impossible to prescribe a joint through rate which does not short haul either the originating or the delivering carrier, or some intermediate carrier. Therefore, under a strict interpretation of the Supreme Court's ruling a practical application of the law is well nigh impossible.

With regard to the issue involved in the complaint of the Fort Smith, Subiaco & Rock Island, the following is pertinent:

Fort Smith is quite a jobbing center, a great quantity of machinery and equipment, including cotton gin machinery and bagging, originating in the southeast, particularly in Georgia and Alabama, and moving to it. Prior to the construction of the Subiaco Line to a connection with the Rock Island which created another direct line from the southeast to Fort Smith, this traffic moved through Memphis, Tenn., thence via either the Frisco, Missouri Pacific or Rock Island, or via Little Rock in connection with the Rock Island. In the case of the routing via the Rock Island, traffic was surrendered to the Frisco at Mansfield, Ark., since the Rock Island had no entry into Fort Smith.

We asked for the publication of joint rates not from Missouri Pacific points, but from points beyond Memphis and Little Rock on the east and Fort Smith on the west. Just before the rates were enjoined we actually secured initial routing on six cars of machinery originating in Georgia on the Southern, destined to Fort Smith and routed Southern to Memphis, Rock Island to Ola, Subiaco Line to Paris, and Missouri Pacific to Fort Smith. While these cars were in transit the temporary injunction was granted to the Missouri Pacific and we were necessarily forced to re-route this shipment via Memphis over the Missouri Pacific since the consignees wanted Missouri Pacific delivery at Fort Smith.

Sugar and other commodities from New Orleans could have been routed, if joint rates prevailed, via the Memphis gateway in connection with the Rock Island-Subiaco Line, and in none of these instances would the Missouri Pacific have participated in the movement had not the Subiaco Line obtained this traffic through solicitation. On westbound traffic the Subiaco Line had control of some traffic that would have moved into Fort Smith from Kansas City Southern, Midland Valley, Frisco and Fort Smith & Western points, or beyond these lines. Likewise, it would not have moved in connection with the Missouri Pacific had not the Subiaco Line obtained the routing.

In each of these instances the Missouri Pacific was at no time in possession of the traffic. The same principle applies in connection with Quanah Line routing. Testimony that I gave in the Subiaco case, admitted that a carrier once in possession of the traffic was entitled to its longest haul, provided it did

not discriminate to the extent that it short-hauled itself by interchanging the traffic with one line in the general direction of the traffic to the exclusion of another line.

The Commission, with some limitation, passed favorably on the complaint of the Subiaco Line, and then when the Supreme Court issued its injunction against the decision, it did not clarify the situation. It rather muddled it because it did not clearly indicate in what particulars the rights of one carrier were superior to those of another, and as a consequence we find trunk lines demanding their maximum haul on traffic moving in both directions regardless of whether that carrier originates the traffic or not. It is obvious that a trunk line with long mileage, strategically located and reaching into the production and consumption territories, could in the final analysis "stranglehold" competitive carriers.

The Commission is unable, under the existing statute as interpreted by the Supreme Court of the United States, to properly serve the public interest. Certain routes which the public is entitled to use because of time in transit, cannot be established at all, due to the fact that two or more of the carriers involved would be short-hauled. Since not only the originating carrier but all carriers in the route cannot be short-hauled, it is obvious that many routes cannot be established at all, except by consent of all the carriers. That there are instances where attempts have been made to protect existing routes not in the public interest, or to establish others, is not denied. Neither can the statement be successfully refuted that many rate-making lines between two points which at the same time would comprise the fastest available route are not participating in the business because one or more carriers would be short-hauled.

As an indication of the interpretation given by some carriers as to the effect of the Supreme Court's ruling in the Subiaco Routing Case, I quote verbatim from a brief filed in behalf of a respondent carrier to a complaint, *to-wit*:

"Further, respondents have no objection to include the Quanah in any particular route that may not now be available; *however*, respondents feel that they alone should be the judge of what routes should be established."

Another illustration follows:

"Respondents do object to being deprived of their rights to determine with which line or lines they will join in the transportation of these commodities, bearing in mind always the mandates of the law as contained in the various sections of the Interstate Commerce Act."

When appearing before the House Committee at Washington recently a traffic official of a Class I carrier stated that short-hauling always resulted in the inclusion of one or more additional lines. This does not "click" with the records that have been made in a number of Quanah Line cases. I recall one particularly in which the Quanah Line was denied participation in a through rate involving four lines, yet as between themselves Class I carriers publish a rate on the identical traffic embracing exactly seven lines. One carrier went a step farther—it surrendered the traffic already in its possession, passed it to a connecting line for a haul, and received it back for another road haul before effecting final delivery.

I submit therefore that the Interstate Commerce Commission is the proper agency for the determination of whether or not a particular route is in the public interest. In other words, the bill will transfer the power back to the Commission where it belongs.

Charles H. Sommer,
President, Quanah, Acme & Pacific.

[Mr. Sommer addressed a letter similar to the above to the editor of the Wall Street Journal, and to it Mr. Woodlock replied in part as follows:

"You seem to be unaware or perhaps have forgotten that I was the sole dissenter in the Commission in the case to which you refer. The evidence in that case was clear that the whole purpose of the Subiaco road was to secure bridge traffic over its line with the effect that Missouri Pacific would have been compelled to surrender five miles of haul to give the Subiaco one. If that was not robbing Peter of five dollars to give Paul one dollar, then I do not know what it was.

"Sympathizing altogether with the desire of short lines to attract bridge traffic, I cannot see any public interest in requiring other roads to surrender their long haul simply for that purpose. Granted that neither road was in possession of the

traffic, I can see no reason of a genuinely public kind—apart from economy in operation by saving of distance, which was not in this case—for compelling one road to give up traffic to another."

Steam vs. Diesel Locomotives

CHICAGO.

To THE EDITOR:

While we are entertained with newspaper and technical journal descriptions of the progress of the internal-combustion locomotive, in which field marked advancement is being made, we are still concerned with the necessity of moving most of our freight and passenger tonnage under steam. In addition, we are concerned with steam-heating and air-conditioning passenger and perishable freight tonnage.

When newspaper editors run out of political subjects they seem to turn to criticism of the railroads for not adopting, overnight, the Diesel idea for speed transportation; seemingly forgetting that they may also be presenting themselves as the last defense line of the southern Illinois, or Indiana, or Kentucky, or Montana, or West Virginia coal-mining interests.

The fundamental characteristics of the Diesel engine as a prime mover are admirable as applied to switching service. The high starting torque is the feature which makes this so. But until we obtain a direct mechanical drive which conforms the limitations of a characteristically non-variable-speed prime mover to the variable-speed requirements of a road locomotive, we had better not assume that the problems of motive power have been all solved in favor of the Diesel.

In the central, northwestern, and southeastern areas of the United States, many of our railroads have been built up as much to serve the coal-mining and allied industries as the agricultural. Except in special cases, it is just as wrong economically to haul tonnage through a coal-producing territory, by consumption of oil, as it is to haul tonnage through an oil-producing territory by consumption of coal.

In the future, the Diesel locomotive may be made to successfully consume powdered coal; but at present we must face the current situation. Diesel locomotives are consuming oil as fuel wherever operated. Diesel locomotives are consuming oil as fuel in oil-producing districts also, but steam locomotives are burning coal in coal-producing districts with good economy.

Certainly the performance of the oil-burning Hiawathas of the Milwaukee, and the 400's of the North Western, should satisfy the most sensationalized reportorial minds, as a continuous demonstration of oil-burning steam power availability. In the meantime, the Chesapeake & Ohio, the Northern Pacific, the Union Pacific and other trunk lines register new steam locomotive purchases of largest size for reasons, I think, closely allied to those given above.

What the Diesel engine, for success in general locomotive use, requires and does not yet have, is an adaptability for consumption of any class of fuel economically best available to its railroad and a direct drive which will transform its essentially non-variable speed into the variable-speed requirement of a transportation haulage unit of great horsepower.

L. F. WILSON, President,
Wilson Engineering Corporation.

No "Dismissal Compensation" When Uncle Sam is the Employer

NEW YORK

To THE EDITOR:

In connection with the current negotiations between the Association of American Railroads and Railway Labor Executives Association, on dismissal compensation, I quote from the 1935 Annual Report of the Inland Waterways Corporation:

"On January 1, 1935, a drastic reorganization through consolidation of departments, reduction of personnel, etc., effected a very large reduction in overhead, a great increase in efficiency, and corresponding satisfactory increase in revenue."

That's how it is done by Government subsidized competitors. Apparently sportsmanship is as extinct as the dodo.

EUGENE S. BROOKS.

NEWS

"March of Time" Shows Drama of Rail Revival

Film boosts industry as a whole, even though many alert carriers are omitted

The "March of Time," motion picture dramatization of current events, has this week released a new film portraying the revival in the railroads' appeal to the traveling public. The picture is decidedly friendly toward the railroads; consequently the more of the public who see it, the greater its value will be. As a means of identification so that cinema-goers may know what to look for—the other portrayal on this reel is the attitude of the British public and statesmen toward Italy and the League of Nations.

A liberal sprinkling of railroad officers were in attendance at the pre-view showing of this film in New York on May 13 and some of them were critical because their particular railroads were not included in the pictures, as they deserved to be. This omission, of course, in no way detracts from the film's good will building function for the *railroad industry as a whole*. The producers obviously could not tell the whole story of all the railroads in 10 or 15 minutes.

Railroading in the "good old days" of wooden coaches, oil lamps and unpunctual operation is shown first and, to be quite frank, is laid on pretty thick. Then the traffic boom of 1920 is shown—yards and stations full.

Next follow some shots which mirror the growth of competition—highways congested with trucks and buses. One view in particular shows the most appealing characteristic of bus travel, namely, passengers looking out past the driver at the road ahead. Another shot shows transport airplanes. Then graphic figures tell the story of the drop in railway traffic and revenues. Idle box cars with waste paper cluttered up around their wheels.

Then—the awakening. Shopmen are shown streamlining a locomotive. Luxurious interiors of modern trains follow in quick succession. Artists and designers are caught at their work of planning the modernization of the industry. We peer over the shoulders of other artists and advertising copywriters preparing a great broadside of publicity material hailing the new day. Thronggs are shown on winter sports trains. Fare reductions are emphasized by the announcer, and people are shown once more flocking to the rails. The tempo is quickened to give the feel-

ing of great effort and wholesale awakening. Luxury—speed—economy, all magnified in a mirror of modern equipment design: This was the impression strongly imprinted on the consciousness of the observer.

As suggested above, many railroads which have made important contributions to recent railroad progress have been omitted. The producers, apparently appalled by the wealth of material on railroad progress, have contented themselves with shots easily available in the New York area. The remarkable achievements of the Western railways are not shown. Neither is there anything about the two roads which pioneered in air conditioning. But the lack of comprehensiveness does not detract from the picture's message in behalf of the industry as a whole. Indeed, names of individual railways are not emphasized by the announcer and are disclosed by the pictures of the equipment—a point upon which the average lay cinema-goer is not well informed and probably will fail to notice. All the railroads will get credit in the public mind for the performance of the three or four that are shown.

"Time marches on"—and this picture shows with great dramatic skill that the railroads march on, too.

March Air-Express Traffic Above 1935

March business of the Railway Express Agency's Air Express Division was 68 per cent above that of March, 1935, according to a summary of reports from agents in 215 airport cities. Although many rail-air shipments are included, the increase had reached the above-mentioned figure before complete reports had been received for this business from the Express Agency's 23,000 off-air line offices. One factor in the increase was the heavy shipments flown to flooded districts.

I. C. C. Allows Further Hearing on P. R. R. Purchase of Truck Line

On petition of the Pennsylvania Truck Lines, motor subsidiary of the Pennsylvania Railroad, the Interstate Commerce Commission, Division 5, has ordered a further hearing on its application for authority to acquire the property and business of the Chicago-Cincinnati Motor Freight Lines. In a proposed report, J. Edward Davey, Chief of the section of finance of the commission's Bureau of Motor Carriers, has recommended denial of the application on the ground that it had not been shown that the acquisition would promote the public interest.

More Time and Money Asked for Rail Probe

Senate committee seeks to continue its investigation with a new appropriation

The report of the Senate committee on interstate commerce favoring a continuation during the next Congress of the investigation of railroad financial matters being conducted under Senate Resolution 71, with an additional appropriation of \$100,000 for its expenses, was submitted to the Senate on May 7 and automatically referred to the committee to audit and control the contingent expenses of the Senate. When the original resolution was referred to it this committee held it up for some time until its scope was limited. In explanation of the request for more time and more money the interstate commerce committee said in its report:

"The complicated interrelations of banking interests, stock-brokerage houses, railroad consultants, equipment companies, and other companies closely tied into the financial operations of railroads make it necessary, in order to disclose the facts pertinent to a thorough and complete investigation, for the committee to pursue its inquiry into specific transactions in great detail and to examine the files of a great number of persons and corporations not subject to the jurisdiction of the Interstate Commerce Commission. The very fact that many of these persons and companies are not within the jurisdiction of the commission has increased the burden placed on the committee, since a great volume of data which would have been on file with the commission had such companies been subject to its jurisdiction, must now be obtained by the committee through scattered sources, in some cases difficult of access.

"For instance, one of the several railroad holding company systems comprise over 50 companies other than railroad operating companies, most of which it has been, or will be, necessary for the committee to examine in order to provide an adequate picture of the financing operations affecting the interests of investors in the securities of the railroads and other companies included in the system. Despite efforts in Congress to subject railroad holding companies to governmental jurisdiction, the complexity of the subject, coupled with developments subject to the excellent earlier studies, have left the public to a considerable extent in the dark as to the present real nature and source of control of railroad holding companies and their sub-

sidiaries and the effect of such companies upon investors, both public and private, in railroad securities.

"If your committee is to be enabled to render a thorough and constructive report and to submit recommendations calculated to result in sounder railroad financing and a sounder railroad structure, it will be necessary to provide adequate funds to conduct a more thorough and incisive investigation than has been possible to date. The committee has economized in every possible way consistent with sound, efficient and constructive work. The committee considers that the amount provided for in this resolution is the least that can meet the minimum requirements of an investigation adequate to protect the investment of the government and investors generally and the interest of the public at large."

Club Meeting

The Railway Club of Pittsburgh (Pa.) will hold its next meeting at the Fort Pitt Hotel, Pittsburgh, on Friday evening, May 28, at 7 o'clock Eastern Standard Time. Joseph C. McCune, assistant director of engineering of the Westinghouse Air Brake Company, will speak on air-brake development.

How Fast Are We Going?

The use of speedometers in the solarium of the streamlined trains and in day coaches of some other through trains is the latest novelty offered by the Boston & Maine. The first train to be so equipped will be the "Flying Yankee," between Boston and Portland, and beyond over Maine Central lines to Bangor, Me. The speedometer will be illuminated, and will have a clock included on its face.

R. F. C. Loans To Railroads

The Reconstruction Finance Corporation up to April 30 had authorized loans to railroads amounting to \$614,946,795, according to its monthly report, and had disbursed \$494,745,824 of the amount of which \$100,578,154 had been repaid. In addition, the corporation had approved in principle loans in the amount of \$36,694,000 upon the performance of specified conditions.

Railroad Employment Increased in April

Class I railroads, excluding switching and terminal companies, reported to the Interstate Commerce Commission a total of 1,049,543 employees as of the middle of April, an increase of 7.42 per cent as compared with the number in April last year and an increase of 2.63 per cent as compared with the number in March.

All Available Automobile Cars Being Used

Although the railroads have been steadily increasing their supply of cars suitable for shipping automobiles, "all of such cars as well as the highways and water routes" are being used just now "to the limits of their capacity" to care for the current factory sales of automobiles, according to a recent statement issued following a meeting at Detroit, Mich., of the traffic man-

agers of companies affiliated with the Automobile Manufacturers Association. The foregoing followed a reference to reports received at the meeting which "indicate that thousands of freight cars formerly used in transporting automobiles are no longer in service."

The meeting was held primarily to review plans in effect at the factories for insuring observance of highway safety regulations in the driving of trucks.

Highway Bill Passed By Senate

The Hayden-Cartwright highway construction bill, which includes authorization for the appropriation of \$50,000,000 to be allotted to the states by the federal government in 1938 and a like amount in 1939 for railroad-highway grade crossing protection and elimination, was passed by the Senate on May 8. The bill had been passed by the House.

Increase in Truck Shipments of Livestock

Motor trucks hauled 36,170,870 head of livestock to market last year, according to a recent statement from Arthur C. Butler, manager of the motor truck department of the Automobile Manufacturers Association. Mr. Butler's statement, which cited records of the U. S. Department of Agriculture covering receipts at 62 leading markets, pointed out that the truck movement of livestock last year was 21 per cent above that of 1934.

"Super Chief" Placed in Service

The "Super Chief" of the Atchison, Topeka & Santa Fe was placed in service between Chicago and Los Angeles on May 12, on a schedule of 39 hr. and 45 min., leaving Chicago at 7:15 p.m. Central Time. Its inauguration was celebrated by a triple birthday party held in the Dearborn Street station just before departure, the occasion being the birthday of the new train and the anniversaries of Samuel T. Bledsoe, president of the Santa Fe, and his daughter, whose birthdays fall on May 12. Ceremonies began at 7 p.m. with a broadcast over station WGN, and were followed by the birthday party at 8 p.m. and the christening of the train by Mrs. Bartlett Cormack, daughter of Mr. Bledsoe, prior to the train's departure at 8:15 p.m. daylight time.

Revision of Tax Bill Proposed

Revision of the corporation tax bill as passed by the House was proposed by the Senate committee on finance early this week when Chairman Harrison of the committee called on the Treasury for estimates of the probable revenue to be derived from a plan providing for a 15 per cent tax on corporate net income and a super-imposed tax on undistributed income in excess of 30 per cent, ranging from 5 to 45 per cent.

Jesse Jones, chairman of the Reconstruction Finance Corporation, wrote the committee that "if substantial concession could be made that would encourage modernization, new plant construction, and new buildings to replace old ones, new equipment for railroads and industry of all kinds, including allowances for new debts created

for these purposes, the employment situation and business generally would in all probability be greatly helped, and society much better served."

Denial of Bus Application Recommended to I. C. C.

Denial of the application of the Pan-American Bus Lines for a certificate to continue an operation as a common carrier of passengers between New York and Miami which was begun on August 10, 1935, is recommended by John L. Rogers, director of the Bureau of Motor Carriers of the Interstate Commerce Commission, in a proposed report on one of the first of such applications to come before the commission under the motor carrier act, on the ground that existing services and facilities between those points has been reasonably convenient and reasonably adequate. The application was opposed at the hearing by various companies affiliated with the Greyhound Lines and other motor carriers now furnishing service between the points named as well as by the railroads. The report goes into great detail in analyzing the present service of the applicant and of the protestants to show that the additional service is not required.

I. C. C. Asked to Suspend Low Truck Rates

Railroads are no longer the only ones to complain of unduly low freight rates charged by truck operators. In one of the first requests for suspension of truck rates filed with the Interstate Commerce Commission under the provisions of the motor carriers act of 1935 the Mid-Western Motor Freight Bureau, Kansas City, Mo., has protested against the rates charged by Powell Bros. Truck Lines, Inc., and published in its tariff covering rates to become effective on May 18 between points in Illinois, Missouri, Oklahoma, Arkansas, and Kansas, asserting that the proposed rates would be unduly low and, if permitted to become effective, do serious injury to the operation of many motor lines operating in the territory.

I. C. C. Disclaims Responsibility for Cancellation of Reduced Fares

In view of numerous inquiries received, the Interstate Commerce Commission on May 12 issued a notice saying it desired to make it clear that the order of February 28, 1936, in the passenger fare investigation required the railroads to publish, effective June 2, 1936, only maximum fares and not minimum fares. "In other words", it said, "the order requires the establishment of fares not exceeding 3 cents per mile in sleeping and parlor cars, and 2 cents per mile in coaches, and nothing therein contained or since done by the commission may be interpreted as requiring the carriers to cancel any special convention fares lower than that basis now published or to decline to establish such fares in the future. Any cancellation of such special fares for use in sleeping or parlor cars which are on a basis lower than 3 cents per mile, or any refusal to publish such special fares in the future, is within the discretion of the carriers."

The secretary of the Rotary Inter-

national wrote a letter to the commission saying it had been notified by railroad passenger associations in February that a rate of a fare and one-third for the round trip would be available for its convention and that the cancellation of this rate would undoubtedly reduce the number of people traveling to the convention. He asked that the commission make it possible for the railroads to abide by their commitments. To this Chairman Mahaffie of the commission replied that no action by the commission was necessary because its order prescribed only maximum fares and that the question as to whether lower fares shall be made "is a question of managerial discretion and of railroad policy."

President Told Railroad Equipment Offers Employment Opportunities

Industrial leaders who have conferred with President Roosevelt recently on methods of increasing industrial employment have emphasized the desirability of exploring the industries showing the greatest possibilities of expansion, railroad equipment and housing, the President said at his press conference on May 8. The railroads need new equipment, the President said, but their capital structure and the necessity for earning fixed charges is an obstacle, and while there has been a great increase in the construction of houses costing \$5,000 or more there are enormous possibilities if methods can be developed for constructing suitable houses in the lower-price field. He said that plans for government loans to railroads for equipment were not being considered, but did not indicate any plan for bringing out the possibilities of the two industries. When asked if the provisions of the pending tax bill do not operate to hamper railroads that would otherwise devote a part of their earnings to equipment financing he indicated that that question was not yet settled.

Mechanical Advisory Report

The Mechanical Advisory Committee, appointed by the Federal Co-ordinator for the purpose of co-operating with his Section of Transportation Service, has recently completed a report of seven typewritten volumes covering practically every important phase of the modernization of railway equipment. The interest in and value of this report is such that the General Committee of the Mechanical Division is considering the advisability of printing and distributing it in a single volume of 850 to 1,000 pages, at a cost of \$8.00 to \$10 a copy, depending upon the number printed.

Both the present and the future requirements of mechanical equipment and motive power designed to meet the needs of railroad shippers and travelers are considered in this report which covers the following general subjects: Steam locomotives; oil-electric locomotives; electric locomotives and electrification of railroads; freight cars; reduction of tare weight; evaluation of light weight; development of passenger car design; materials and methods of construction; rail-motor cars; and container cars.

According to a circular letter recently issued by the secretary of the Mechanical

Division, this report will be available to members at the cost of printing, and to non-members at twice this price. Those who desire copies are requested to advise the secretary.

Highway Trailers on Flat Cars

The Baltimore & Ohio, in conjunction with Keeshin Transcontinental Freight Lines, is planning to inaugurate a co-ordinated rail-highway service for l.c.l. freight between all points on the B. & O. system. The plan, which is similar to that in effect on the Rock Island and that proposed in a recent Chicago Great Western tariff suspended by the Interstate Commerce Commission, involves the transportation of highway trailers on flat cars between communities where the pick-up and delivery service is performed by Keeshin. While the proposed plan extends to New York City and thus to Reading and Central of New Jersey facilities used by the Baltimore & Ohio, the service will not include local traffic on either of these lines.

Plans for another Chicago-Twin Cities service, also similar to that proposed by the Chicago Great Western and Keeshin in the above-mentioned suspended tariff, are being formulated by 14 interstate trucking companies, operating under the name of Illinois-Minnesota Motor Carriers Conference.

Railroad "Fans" Make Trip Over East Broad Top

The National Railway Historical Society and the Washington, D. C., division of the Railroad Enthusiasts, Inc., were joint sponsors of a trip for railroad "fans" over the East Broad Top on Sunday, May 3. Special arrangements were made by the Pennsylvania for transporting groups from New York, Philadelphia, Pa., Lancaster, Baltimore, Md., and Washington to Mount Union, Pa., the northern terminus of the East Broad Top. From there a special train carried the party of 80 on a seven-hour tour, covering practically the entire E. B. T. system. A stop was made at Orbisonia, Pa., where the general offices and shops are located and where practically all the road's locomotives had been placed in convenient positions for photographing.

The New York division of the Enthusiasts will hold its final meeting of the season on Friday evening, May 22, at 7:45 p.m. in Room 2726, Grand Central Terminal, New York. The Northern Pacific motion picture, known as "Number One" will be shown and J. M. Fitzgerald, vice-chairman, Committee on Public Relations, Eastern Railroads, will speak. This group is planning for June 14 a trip over the Central New England, the Poughkeepsie bridge and the Lehigh & New England.

Green Diamond on Good Will Tour

The Green Diamond, streamlined train of the Illinois Central, following a good will trip through the southwest, the Mississippi Valley and the great lakes region, and a series of test runs between Chicago and St. Louis, will be placed in regular service between these cities on May 17. At the dedication ceremonies on that day Miss Audry Louise Jones, Houston, Tex., will

act as sponsor at the christening. Miss Jones is the 14-year-old daughter of Tilford Jones of Houston, and granddaughter of Jesse H. Jones, chairman of the Reconstruction Finance Corporation.

During this 7,000-mile good will tour approximately 2,000 persons an hour passed through the train at every stop. Nearly 20,000 persons inspected the train at Shreveport, La., on April 5. On May 8, 120 members of the Chicago Association of Commerce rode the train to St. Louis to attend a luncheon with the St. Louis Chamber of Commerce, the trip being planned to emphasize the closer relations between the two cities brought about by shortened train schedules. Members of the Traffic Club of Chicago traveled to Springfield on May 14, where the members were entertained by the Springfield Transportation Club and the Mid-Day Luncheon Club. In order that all of this large group could travel on the streamliner, a companion steam train was operated under an arrangement whereby the passengers on the steam train southbound became the passengers on the streamline train on the return trip.

Schneider New Executive Secretary of Western Railways Group

Samuel H. Schneider, secretary of the Association of Western Railways at Chicago, has been elected executive secretary of that association, succeeding the late J. W. Higgins. Edward Murrin, who has been connected with the Association of Western Railways since 1915, has been



Samuel H. Schneider

elected secretary, to succeed Mr. Schneider. These appointments will become effective on June 1.

Mr. Schneider was born on October 19, 1886, at New Albany, Ind. He entered railway service in 1903 with the Southern, serving with this company in various capacities until 1911, when he went to the Missouri Pacific, where he served as secretary to the general superintendent and to the general manager. In 1915, Mr. Schneider became connected with the Association of Western Railways and the General Managers' Association of Chicago, and has served with these organizations up to the present time. In addition to his new position, he is also secretary of the General Managers' Association of Chicago and the Chicago Railroad Presidents' Conference.

ence, and is assistant to the chairman of the Western Association of Railway Executives.

Modified Eastern Pick-Up and Delivery Plan Effective May 25

The Interstate Commerce Commission on May 12 issued a special permission order authorizing the eastern railroads to establish their modified pick-up and delivery service by filing tariffs on not less than ten days' notice. Under this authorization the Eastern lines have filed tariffs making the service effective on May 25.

A statement issued following a meeting of participating roads in New York last week pointed out that the action "will extend the existing restricted arrangements for pick-up and delivery services by making them applicable for all distances, but will not include the allowance to shipper or consignee provided in the pick-up and delivery tariffs on file with the Interstate Commerce Commission but not operative because of suspension by that body pending an investigation which it has instituted."

Meanwhile, the Merchant Truckmen's Bureau of New York, one of the principal protestants in proceedings leading to the suspension of the original Eastern storedoor tariffs which were to become effective April 1, is calling upon truckers to rally in opposition to the railroads' modified proposal. The Bureau sponsored a mass meeting in this connection in New York on May 13. The announcement of this meeting stated that the Interstate Commerce Commission "must be persuaded to reconsider the granting of this permission" to the railroads pending the result of its investigation of the April 1 tariffs.

H. G. Taylor Addresses Traffic Club of New York

Harry G. Taylor, chairman of the Western Association of Railway Executives, spoke on "Excessive Regulation" at the monthly noon-day meeting of the Traffic Club of New York, held at the Hotel Commodore in that city on May 13. Mr. Taylor characterized his talk as a summary of the address which he delivered recently in New Orleans, La., before the Associated Traffic Clubs of America and which is published elsewhere in this issue.

He sketched the growth of railroad regulation and found that its cumulative effects have been increased costs of transportation, interference with service and the stifling of initiative. New competition, he held, has eliminated the need for many of the restrictions to which the railroads are now subjected, and he would like to see a lessening of regulation so that railroad men can prove that their "courage for the job" is still strong. As examples of recent railroad enterprise he cited the streamlined trains, the expedited passenger services, the air-conditioning programs, the safety record, and storedoor delivery services.

At a brief business session, held prior to Mr. Taylor's address, the club adopted unanimously a resolution opposing passage of the Wheeler-Crosser "job-freezing" bill. The resolution said that the measure "seeks objectives inconsistent with sound

transportation and is not in the public interest." G. C. Manning, assistant vice-president of the Erie and president of the Club, was chairman of the meeting.

Joint Rail-Truck Tariff Filed

The Keeshin Motor Express Company, Inc., has filed with the Interstate Commerce Commission a tariff publishing joint and proportional motor-rail-motor rates on freight in trucks, trailers, or semi-trailers, between points in trunk line and central freight association territories, and points in Iowa, Kansas, Minnesota, Missouri, Nebraska, and Wisconsin, governed by the transcontinental motor freight classification, naming the Chicago Great Western and Clinton, Davenport & Muscatine railroads and 42 motor carriers as participants. The effective date was named as June 8. At the same time special per-

mission was asked to add the Chicago Great Western as a participating carrier in the transcontinental motor tariff. A tariff filed by the Chicago Great Western to become effective on March 10 on loaded or empty trucks, trailers, and semi-trailers loaded on flat cars between Chicago and the Twin Cities was suspended by the commission on protests by the other railroads and has been the subject of recent hearings.

Net Deficit For Two Months \$19,588,185

Class I railroads for the first two months of 1936 had a net deficit after income and fixed charges of \$19,588,185, as compared with a deficit of \$39,181,728 in the corresponding period of last year, according to the Interstate Commerce Commission's monthly compilation of selected

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS IN THE UNITED STATES

Compiled from 138 Reports (Form IBS) Representing 144 Steam Railways
TOTALS FOR THE UNITED STATES (ALL REGIONS)

For the month of February 1936	Income Items	For the two months of 1936
\$33,594,715	1. Net railway operating income.....	\$69,359,467
9,980,838	2. Other income	21,867,366
43,575,553	3. Total income	91,226,833
1,571,152	4. Miscellaneous deductions from income	3,088,267
42,004,401	5. Income available for fixed charges	88,138,566
10,915,831	6. Fixed charges:	
41,511,931	6-01. Rent for leased roads.....	21,962,299
52,648,862	6-02. Interest deductions	83,299,307
10,644,461	6-03. Other deductions	435,481
1,029,832	6-04. Total fixed charges.....	436,728
*11,674,293	7. Income after fixed charges.....	105,697,087
16,046,450	8. Contingent charges	* 17,558,521
1,731,491	9. Net income†	* 37,167,064
11,830,073	10. Depreciation (Way and structures and Equipment)	2,029,664
2,746,045	11. Federal income taxes.....	* 19,588,185
13,647,279	12. Dividend appropriations:	
2,853,628	12-01. On common stock.....	14,279,402
	12-02. On preferred stock.....	3,607,592
		16,634,937
		3,295,850
	Balance at end of February 1936	1935
	\$689,420,014	\$793,463,145

Selected Asset Items		
13. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707).....		
	\$689,420,014	\$793,463,145
14. Cash	\$461,414,987	\$325,715,971
15. Demand loans and deposits.....	4,189,754	12,560,118
16. Time drafts and deposits.....	28,331,033	32,702,249
17. Special deposits	72,716,501	68,163,282
18. Loans and bills receivable.....	2,717,443	5,140,451
19. Traffic and car-service balances receivable.....	61,676,678	54,658,422
20. Net balance receivable from agents and conductors.....	46,931,628	44,460,726
21. Miscellaneous accounts receivable.....	137,654,406	144,339,432
22. Materials and supplies.....	287,935,172	300,010,846
23. Interest and dividends receivable.....	27,634,311	44,034,026
24. Rents receivable	2,155,100	2,754,522
25. Other current assets.....	5,691,866	10,697,013
26. Total current assets (items 14 to 25).....	\$1,139,048,879	\$1,045,237,058

Selected Liability Items		
27. Funded debt maturing within 6 months‡.....	\$239,626,456	\$234,038,165
28. Loans and bills payable§.....	\$310,202,570	\$318,740,544
29. Traffic and car-service balances payable.....	76,107,390	69,938,315
30. Audited accounts and wages payable.....	221,345,380	206,998,531
31. Miscellaneous accounts payable.....	72,779,620	84,236,648
32. Interest matured unpaid.....	433,784,401	322,071,962
33. Dividends matured unpaid.....	17,596,398	4,630,568
34. Funded debt matured unpaid.....	395,989,903	279,616,041
35. Unmatured dividends declared.....	17,296,033	17,296,056
36. Unmatured interest accrued.....	108,054,749	108,770,809
37. Unmatured rents accrued.....	32,511,727	32,424,209
38. Other current liabilities.....	21,513,672	23,335,028
39. Total current liabilities (items 28 to 38).....	\$1,707,181,843	\$1,468,058,711
40. Tax liability (Account 771):		
40-01. U. S. Government taxes.....	\$42,011,071	\$35,947,777
40-02. Other than U. S. Government taxes.....	128,479,676	128,919,410

† The net income as reported includes charges of \$1,436,183 for February, 1936, and \$2,843,953 for the two months of 1936 on account of accruals for excise taxes levied under the Social Security Act of 1935; also \$179,889 for February, 1936, under the requirements of an Act approved August 29, 1935, levying an excise tax upon carriers and an income tax upon their employees, and for other purposes. (Public No. 400, 74th Congress.) The net income for February, 1935, includes charges of \$1,931,214 and for the two months of 1935 of \$4,103,322 because of liability under the Railroad Retirement Act of 1934.

‡ Includes payments which will become due on account of principal of long-term debt (other than that in Account 764, Funded debt matured unpaid) within six months after close of month of report.

§ Includes obligations which mature not more than 2 years after date of issue.

* Deficit or other reverse items.

NET INCOME OF LARGE STEAM RAILWAYS WITH ANNUAL OPERATING REVENUES ABOVE \$25,000,000

Name of railway	Net income after depreciation		Net income before depreciation	
	For the two months of 1936	1935	For the two months of 1936	1935
Alton R. R.	* \$241,961	* \$299,661	* \$187,525	* \$242,758
Atchison, Topeka & Santa Fe Ry. System	* 1,373,776	* 2,236,942	515,958	* 278,475
Atlantic Coast Line R. R.	743,202	405,656	1,103,170	784,934
Baltimore & Ohio R. R.	* 508,429	* 956,773	728,723	204,211
Boston & Maine R. R.	* 778,115	* 502,161	* 504,062	* 235,900
Central of Georgia Ry.	* 571,842	* 548,935	* 443,410	* 424,383
Central R. R. of New Jersey	* 231,433	* 492,170	23,481	* 209,685
Chesapeake & Ohio Ry.	6,901,726	4,109,045	8,307,121	5,484,506
Chicago & Eastern Illinois Ry.	* 186,731	* 256,691	* 86,837	* 153,510
Chicago & North Western Ry.	* 3,494,209	* 2,559,801	* 2,654,767	* 1,700,920
Chicago, Burlington & Quincy R. R.	421,786	1,014,374	1,187,300	* 171,163
Chicago Great Western R. R.	* 716,705	* 525,932	* 634,729	* 438,566
Chicago, Milwaukee, St. Paul & Pacific R. R.	* 3,356,278	* 4,054,055	* 2,456,973	* 3,113,595
Chicago, Rock Island & Pacific Ry.	* 3,259,176	* 3,220,114	* 2,539,787	* 2,478,988
Chicago, St. Paul, Minneapolis & Omaha Ry.	* 686,008	* 528,943	* 586,098	* 423,145
Delaware & Hudson R. R.	* 117,488	* 602,540	70,938	* 437,676
Delaware, Lackawanna & Western R. R.	* 188,802	* 513,770	* 257,087	* 63,848
Denver & Rio Grande Western R. R.	* 639,004	* 719,728	* 446,068	* 521,205
Elgin, Joliet & Eastern Ry.	180,481	288,384	331,087	436,473
Erie R. R. (including Chicago & Erie R. R.)	* 140,023	* 437,797	511,122	* 259,064
Grand Trunk Western R. R.	115,431	191,689	289,221	* 13,095
Great Northern Ry.	* 3,326,149	* 3,402,435	* 2,712,020	* 2,817,514
Illinois Central R. R.	* 412,682	* 632,636	695,898	638,177
Lehigh Valley R. R.	* 251,934	* 155,699	133,407	247,329
Long Island R. R.	* 364,757	* 510,433	* 166,680	* 319,030
Louisville & Nashville R. R.	1,101,353	392,130	* 1,797,946	1,079,646
Minneapolis, St. Paul & Sault Ste. Marie Ry.	* 1,396,593	* 1,403,063	* 1,191,933	* 1,220,463
Missouri-Kansas-Texas Lines	* 636,188	* 1,196,551	* 422,027	* 97,441
Missouri Pacific R. R.	* 1,832,813	* 3,110,781	* 1,130,383	* 2,381,701
New York Central R. R.	* 1,092,116	* 1,904,985	1,604,898	868,484
New York, Chicago & St. Louis R. R.	* 254,233	* 13,638	512,804	258,325
New York, New Haven & Hartford R. R.	* 1,065,792	* 2,002,516	* 495,894	* 384,851
Norfolk & Western Ry.	* 4,772,038	* 2,537,820	* 5,518,322	* 3,273,761
Northern Pacific Ry.	* 4,489,843	* 2,710,265	* 1,970,285	* 2,185,398
Pennsylvania R. R.	* 2,212,754	1,999,297	5,676,098	5,383,118
Pere Marquette Ry.	199,659	243,555	624,153	674,771
Pittsburgh & Lake Erie R. R.	475,125	440,037	775,713	724,516
Reading Co.	* 1,026,438	* 682,023	* 1,561,138	* 1,186,151
St. Louis-San Francisco Ry.	* 1,446,573	* 2,201,878	* 907,931	* 1,672,932
St. Louis Southwestern Lines	* 161,030	* 121,830	* 59,837	* 17,043
Seaboard Air Line Ry.	* 1,361,125	* 1,507,674	* 1,047,920	* 1,201,118
Southern Ry.	* 383,846	* 1,014,288	157,593	* 544,905
Southern Pacific Transportation System	* 1,952,270	* 2,399,736	* 635,893	* 1,142,869
Texas & Pacific Ry.	* 99,922	* 159,488	293,991	41,379
Union Pacific R. R.	* 56,951	* 290,122	999,264	787,890
Wabash Ry.	* 413,619	* 678,418	* 56,458	* 317,409
Yazoo & Mississippi Valley R. R.	* 260,517	* 613,030	* 177,364	* 514,369

† Report of receiver or receivers.

‡ Report of trustee or trustees.

§ Includes Atchison, Topeka & Santa Fe Ry., Gulf, Colorado & Santa Fe Ry., and Panhandle & Santa Fe Ry.

¶ Includes Boston & Albany, lessor to New York Central R. R.

|| Includes Southern Pacific Company and Texas & New Orleans R. R. The operation of all separately operated solely controlled affiliated companies, resulted in a net deficit of \$709,085 for two months of 1936 and \$694,495 for two months of 1935. These figures are not reflected in this statement.

* Deficit.

income and balance-sheet items. For February there was a net deficit of \$11,674,293, as compared with a deficit of \$17,829,851 for February last year. Total current assets at the end of February amounted to \$1,139,048,879, while total current liabilities were \$1,707,181,843. For the two months period 51 railroads reported a net income of \$23,384,502 and 84 roads reported a deficit of \$42,972,687. The commission's compilation is shown in the accompanying tables.

State Workmen's Compensation Act May Bar Action Against Railroad

The Supreme Court of the United States holds that a switchman, injured in the course of his employment in intrastate commerce in California on the Atchison, Topeka Santa Fe, by a defective coupling apparatus on a freight car alleged to have been used in violation of the Federal Safety Appliance Acts, cannot maintain an action for damages against the railroad, his sole remedy being under the California Workmen's Compensation Act. The court said:

"The absolute duty imposed necessarily supersedes the common law duty of the employer. But, unlike the Federal Employers' Liability Act, which gives a right

of action for negligence, the Safety Appliance Acts leave the nature and the incidents of the remedy to the law of the states . . .

"California is at liberty to afford any appropriate remedy for breach of the duty imposed by the Safety Appliance Acts. Her choice in the matter raises no federal question and the federal courts are as much bound as those of California to conform to the remedial procedure she has adopted. There is nothing to prevent her prescribing workmen's compensation, elective or compulsory, in lieu of a common law or statutory action for disability or death arising from a breach of the duty imposed."

The court also held that, by its plain terms, the California compensation law embraces injuries to an employee under circumstances such as in this case. Judgment for defendant in the Ninth Circuit Court of Appeals was affirmed. Decided April 27, 1936. Opinion by Mr. Justice Roberts.

"Abraham Lincoln" on Faster Schedule

The Alton, effective May 17, will place its "Abraham Lincoln" on a schedule of 4 hrs. 55 min. between Chicago and St. Louis, thereby meeting the time of the Illinois

Central's "Green Diamond," which will be placed in service on that day. The Abraham Lincoln will leave St. Louis at 8:55 a.m. and will arrive in Chicago at 1:53 p.m. Returning the same day it will leave Chicago at 4:30 p.m. and will arrive in St. Louis at 9:25 p.m. Since April 27 this train has been hauled by the Diesel electric locomotive heretofore used on the Royal Blue of the Baltimore & Ohio.

Smoke Prevention Association to Meet at Atlanta

The Smoke Prevention Association will hold its thirtieth annual convention June 2 to 5, inclusive, at Atlanta, Ga. Included in the extensive program covering all phases of smoke prevention work will be four addresses on railway aspects of the problem, presented by railway representatives. The detailed program is as follows:

Registration and Opening Session, June 2, 1936, 2:00 p. m.

WEDNESDAY MORNING, JUNE 3, 1936, 10:00 A. M. Addresses by Ralph Johnson, The Hays School of Combustion, Chicago, Ill. Prof. Jas. M. Breckenridge, Vanderbilt University, Nashville, Tenn. Robert Collett, Fuel Agent, Frisco Lines, St. Louis, Mo.

WEDNESDAY AFTERNOON, JUNE 3, 1936, 2:00 P. M. Addresses by G. G. Ritchie, Fuel Engineer, C. & O., Richmond, Va.—"Selection of Locomotive Fuels." Thos. E. Shaughnessy, Engineer, Northern Illinois Coal Corp., Chicago.—"Influences Resulting From the Presence of Sulphur in Coals." Don R. Goodwin, Traveling Fireman, G. T. W., Battle Creek, Mich.—"Present Day Developments in Smoke Elimination at Engine Terminals."

THURSDAY MORNING, JUNE 4, 1936, 10:00 A. M. Addresses by John D. Battle, Executive Secy., National Coal Ass'n, Washington, D. C.—"The Bituminous Coal Industries Program." Marc Bluth, Executive Secy., Committee of Ten, Chicago.—"Co-operative Effort Between Stoker Industry and Smoke Abatement Officials." Chas J. McCabe, Chief Smoke Inspector, Detroit, Mich.

THURSDAY AFTERNOON, JUNE 4, 1936, 2:00 P. M. Addresses by Wm. Culbert, Chief Smoke Inspector, Nashville, Tenn.—"Practical Procedure for Inaugurating and Conducting Smoke Abatement Work in the Smaller Cities." Frank H. Lamping, Supervisor, Cincinnati Smoke Abatement League, Cincinnati.—"Dust Fall and Soot Collection Surveys." Dr. R. R. Sayers, Medical Officer in Charge, U. S. Public Health Service, Washington, D. C.

FRIDAY MORNING, JUNE 5, 1936, 10:00 A. M. Addresses by J. E. Bjorkholm, Asst. Sup. of Motive Power, C. & M., St. P. & P., Milwaukee, Wis.—"Practical Smoke Abatement." Geo. A. Soper, Chrmn., Comm. of Sanitation, N. Y. Chamber of Commerce, New York. C. D. Behan, Publicity Dir., Smoke Prevention Ass'n, Chicago.—"Value of Publicity in Smoke Abatement Work." Business Meeting.

Intrastate Character of Switching Charges

The Ohio Public Utilities Commission held that it has jurisdiction to regulate the charges for switching services at Youngstown on carloads of bituminous coal to consignees there, where the coal has been transported from the mines in Pennsylvania by the coal company, first in barges and then in cars over the coal company's own right of way, to Negley, Ohio, where for the first time it is ready for shipment to fill specific orders, and there delivered to the common carriers. The Commission made an order accordingly, directing the Pennsylvania and the Erie to adhere to the

local rates. This order was sustained by a District Court of three judges, application having been made for relief by injunction both interlocutory and final. Judicial Code, section 226. The case came before the Supreme Court of the United States under that section.

The Supreme Court held that the transportation of the coal from Negley to Youngstown in the same state was an intrastate service, not subject to the provisions of the Interstate Commerce Act, and its character as such was not changed because of its preliminary carriage by the shipper and owner, who was not a common carrier, but furnished implements of carriage for its own use exclusively. Such preliminary transportation could not, it was held, be tacked to the intrastate transportation by common carriers. Decree of the District Court was affirmed. Pennsylvania et al. v. Public Utilities Commission of Ohio et al. Decided April 27, 1936. Opinion by Mr. Justice Cardozo.

Mid-Year Meeting R. B. A. May 18

The customary mid-year luncheon meeting of Western members of the Railway Business Association will be held at the Congress Hotel, Chicago, on May 18, when the members will be the guests of the executive committee and the governing board. This meeting will be devoted to a discussion of the railroad situation, conditions within the railroad supply industry and the work of the association during the past six months.

A. B. P. Resolution on Questions of National Policy

Members of the Associated Business Papers, Inc., at their recent meeting at Hot Springs, Va., adopted a series of resolutions setting forth the organization's stand on several questions of national policy affecting government, business and the public.

One resolution expressed opposition to the principle of pending legislation dealing with taxes on undistributed corporation earnings which "would penalize the building up of reserves by means of which purchases of durable goods may be maintained during periods of depression." Another declared that the related problems of unemployment and relief must be solved and to this end urged an immediate and accurate census of unemployment by the government. A third endorsed the appointment by the administration and the senate of committees to investigate governmental expenditures and recommended the establishment of a non-partisan commission composed of representatives of Congress, the administration, taxpayers and tax experts to study the whole field of Federal revenues. Meanwhile it urged that the greatest possible effort be made to balance the national budget through the practice of rigid economy.

Congressional investigations, the next pronouncement said, should be limited to the fields specifically subject to Federal control under the constitution, and governmental agencies should refrain from infringing upon the rights of the citizens. Especially does the organization view with apprehension any encroachment upon the freedom of the press. A final resolution

advocated the development of policies by government and business looking to the increase of construction, production and employment and the reduction of prices to the consumer, "thus assuring an economy of plenty rather than of scarcity, since only through the application of such policies can business successfully meet the challenge to increase employment."

Colonel B. W. Dunn Dies

Colonel B. W. Dunn, who retired on February 1, 1935, as chief inspector, Bureau of Explosives, Association of American Railroads, died on May 10 at his home in New York. He was 75 years old.

As pointed out in the *Railway Age* of February 2, 1935, when his retirement was announced, Colonel Dunn may be called the father of the Bureau of Explosives, he having taken up the enterprise in 1907, while he was still an officer in the United States Army. The Bureau, beginning as a small company of inspectors of explosives in transportation, was, under his direction, developed into an extensive organization, not only representing the railroads in their relations with shippers of explosives and other dangerous articles, but also acting as an auxiliary to the United States Government, in its function of formulating regulations, under authority of Congress, for the safe transportation of explosives throughout the country, not only by railroads but by water as well. The duties of chief inspector during Colonel Dunn's term were both scientific and diplomatic and he was an ideal specialist in both of these functions.

Beverly W. Dunn was born in Louisiana, in October, 1860, and was graduated from West Point, as an honor man, in 1883. He served in the Artillery branch until 1890 and was then transferred to the Ordnance department. In June, 1907, he was "loaned" by the President of the United States to the railroads, as represented in the American Railway Association, for the purpose of organizing the Bureau for the Safe Transportation of Explosives and Other Dangerous Articles. Subsequently, on his own application, he was retired by President Taft.

During the time Colonel Dunn was in the Ordnance department, he had charge of various operations, and it is to him that the United States Government owes some of the important adjuncts for national defense, adopted and used by both the Army and Navy; particularly the explosive that is used to fill projectiles in both the Army and Navy service and known officially as "Explosive D," and unofficially as "Dunnite." Of more importance still and of possibly greater value is the detonating fuse used with this explosive and essential to its efficiency.

Colonel Dunn's early training was wholly in the army, but his marked success in the establishment of the Bureau testified to his adaptability and quickness of perception; a strong man in any field.

Transportation Division to Meet in Chicago

The first annual session of the Transportation division of the Association of American Railroads since 1930 will be held at

the Hotel Stevens, Chicago, on May 21 and 22.

Included on the program will be addresses by J. J. Pelley, president, J. M. Symes, vice president, and Col. R. S. Henry, assistant to president, of the A. A. R., and by Ralph Budd, president of the Chicago, Burlington & Quincy.

Committee reports will be presented at the Friday morning session as follows:

General Committee
Committee on Car Service
Committee on Records
Committee on Demurrage, Storage, Re-
consignment and Diversion

Committee on Railroad Business Mail

The greater part of the two-day session will be devoted to discussions. Each subject will be presented by one or two members selected because of their familiarity with it, following which there will be an open forum discussion by the membership as a whole. The following subjects will be discussed in this manner:

Use of refrigerator cars for other than perishable freight.

Should demurrage rates be reduced?

The average per diem plan.

Junction reports.

The automobile device car; its use, demand and supply.

Have regional transportation and car accounting associations a place in the present day transportation picture?

Equipment and Supplies

LOCOMOTIVES

THE SOUTHERN PACIFIC is inquiring for 18 locomotives—12 of the 4-8-8-2 type and 6 of the 4-8-4 type.

FREIGHT CARS

THE AMERICAN REFRIGERATOR TRANSIT COMPANY is inquiring for 1,000 refrigerator cars of 40 tons' capacity.

PASSENGER CARS

THE TEMISKAMING & NORTHERN ONTARIO is inquiring for five coaches.

IRON AND STEEL

THE DENVER & RIO GRANDE WESTERN has placed an order with the Milwaukee Bridge Company for 195 tons of structural steel for three bridges in Colorado.

MISCELLANEOUS

THE PACIFIC FRUIT EXPRESS COMPANY'S recent order for 2,700 all-steel refrigerator cars includes Alfol insulation furnished by the Alfol Insulation Company, Inc., New York, to be installed as a jacket over the fibrous insulation under steel roofs and on all hatch plugs, at side plates and at the top portion of the steel ends of all the cars.

Continued on next left-hand page

MODERN LOCOMOTIVES

IMPROVE OPERATING RECORDS

"From 1916 to 1934 the tractive power of the average steam locomotive has been raised from 33,188 pounds to 47,712 pounds, an increase of 44%.

"The record shows that the distance between stops for the 1910 locomotive was 40 miles, the 1920 was 60 miles and the 1930, 85 miles. The modern locomotive has more than twice the stamina of the 1910 locomotive, as measured in the miles traveled between drinks.

"The record shows that a few years ago, locomotives were changed every 100 to 150 miles. Formerly four locomotives were used to move a passenger train a distance of 500 miles. Now only one locomotive is used

for the same run. This record is typical of that of many, if not all, railroads.

"The record shows that the average running speed of the 1910 locomotive was 20 M.P.H., that of 1920, 33 M.P.H. and that of the 1930 freight locomotive 42 miles per hour.

"The record shows that in passenger service there are steam locomotives running at 80 miles and 90 miles per hour and capable of sustained speeds for some distance at the rate of 100 to 110 miles per hour.

"The record shows that the draw bar horse power of the 1910 locomotive was 1240, the 1920, 2000, and the 1930, 3600—a mere three-fold increase. And there are locomotives in operation with 4000 to 5000 draw bar horse power."*

Modern locomotives not only improve operating performance but also show a surprising economy in both operating and maintenance costs.

*From a paper by L. W. Wallace, Director of Equipment Research, Association of American Railroads, presented before the Railway Club of Pittsburgh.

LIMA LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO



Supply Trade

Herbert W. Snyder, mechanical engineer of the **Lima Locomotive Works, Inc.**, Lima, Ohio, has been appointed also works manager.

The American Steel Foundries has moved its New York office from 30 Church street to the New York Central building, 230 Park avenue.

H. E. Mensch has been appointed district sales agent for the Michigan territory of the **Ohio Locomotive Crane Company**, Bucyrus, Ohio. Mr. Mensch is located at 424 Book building, Detroit, Mich.

The New York district sales office of the **Republic Steel Corporation** has opened a new sub office in the State Bank building, Albany, N. Y., with **J. M. Higinbotham**, salesman in charge.

I. C. Brentlinger has been appointed purchasing agent of the **Lima Locomotive Works, Inc.**, Lima, Ohio, succeeding **H. L. Breckenridge**, who has become president of the **Superior Body Company**, Lima.

The American Steel Foundries has opened a new branch sales office in the Baltimore Trust building, Baltimore, Md., in charge of **Charles B. Peirce, Jr.**

James E. Nolan has been appointed purchasing agent of the **Scullin Steel Company**, St. Louis, Mo.; **Harry C. Dreibus** has been appointed chief mechanical engineer and **James Glover** and **R. C. Geekie** have joined the sales department, all with headquarters at St. Louis.

Joseph M. Brown, railway representative of the bus and truck division of the **White Motor Company**, with headquarters at Chicago, and previously connected with the Elwell-Parker Electric Company, has been appointed special railway representative of the **National Twist Drill & Tool Company**, Detroit, Mich., with headquarters in Chicago.

The Lincoln Electric Company, Cleveland, Ohio, has made changes and promotions in its sales personnel as follows: **J. S. McKeighan**, has been transferred to the sales staff with office at 1712 Catalpa drive, Dayton, Ohio, operating under the Cincinnati district office; **J. B. McCormick**, has been transferred from the Philadelphia, Pa., office to the Pacific coast with office at Monticello avenue, Fresno, Cal., under the personnel of the Los Angeles office; **Paul W. James** has been transferred from the factory to 16½ Crandall street, Binghamton, N. Y., operating under the Syracuse office, and the Major Engineering Works has moved its offices from 210 Jackson avenue to 312 Second street, Des Moines, Iowa.

The Truscon Steel Company, Youngstown, Ohio, has made arrangements to finance the purchase of Truscon buildings on a long-term basis through the Equipment Acceptance Corporation, a unit

of Commercial Investment Trust, in accordance with the regulations established by the Federal Housing Administration. Under this arrangement purchasers of Truscon buildings may obtain long-term financing where the amount of the loan required is not less than \$2,000 nor more than \$50,000. If the buyer has plants in more than one location the same offer applies to each of them. The loan must be for a period of not less than 6 months nor more than 60 months and must be payable in equal monthly installments. It must be for the purpose of repair, alteration or improvements of real property already improved by, or to be converted into, commercial buildings, manufacturing or industrial plants.

Joseph L. Block, vice-president of the **Inland Steel Company**, Chicago, has been elected executive vice-president in charge of sales to succeed **Charles R. Robinson**, resigned, and **Albert C. Roeth**, vice-president, has been elected vice-president and general manager of sales. Mr. Block has been associated with the Inland Steel Company since 1922. He



Joseph L. Block

has been a vice-president since 1929 and a director since 1930. For a number of years he has been in charge of the sale of bars and semi-finished steel, and has



Albert C. Roeth

also directed the company's advertising activities.

Mr. Roeth has been associated with Inland since 1911, and has been a vice-presi-

dent of the company since 1929. He has been in charge of the sale of structural shapes, plates and sheet piling.

H. W. Johnson has been appointed manager of sales of the Railway Specialty



H. W. Johnson

department of the **Lewis Bolt & Nut Company**, Minneapolis, Minn. Mr. Johnson was born at Marshalltown, Iowa, on November 25, 1884, and after studying mechanical engineering at Iowa State University, entered the employ of the Minneapolis & St. Louis as machinist apprentice on June 1, 1902. On February 1, 1908, he was promoted to car and roundhouse foreman at Peoria, Ill., which position he held until 1915, when he was made general foreman at Marshalltown, Iowa. He held the latter position until 1922, when he was promoted to master car builder, which position he held until August 15, 1923, when he was promoted to superintendent of motive power and rolling stock. He held the latter position until March 1, 1935, and during the past year has been traffic representative for this road.

OBITUARY

Howard P. Anderson, chief engineer, The Standard Stoker Company, Inc., died on May 2, at his home in Erie, Pa., at the age of 57.

William B. Keys, who had been associated with the Baldwin Locomotive Works since 1911, died suddenly in Philadelphia, Pa., on April 30. Mr. Keys was born in Kent county, Va., on December 13, 1873. He served as a telegraph operator on the Norfolk & Southern (now the Norfolk Southern) and afterwards became manager of a steamship company in Norfolk. After serving as a salesman, he was appointed assistant manager of the Richmond, Va., office of Baldwin in April, 1923, and became manager of the same office in January, 1929. Upon the discontinuance of the Richmond office in 1931, Mr. Keys established headquarters at the main sales office in Philadelphia and from there he continued to cover the southern territory.

Burton L. Delack, general assistant to Vice-President W. R. Burrows of the General Electric Company and until two years ago manager of the company's Schen-

YOU CANNOT HAVE

Both

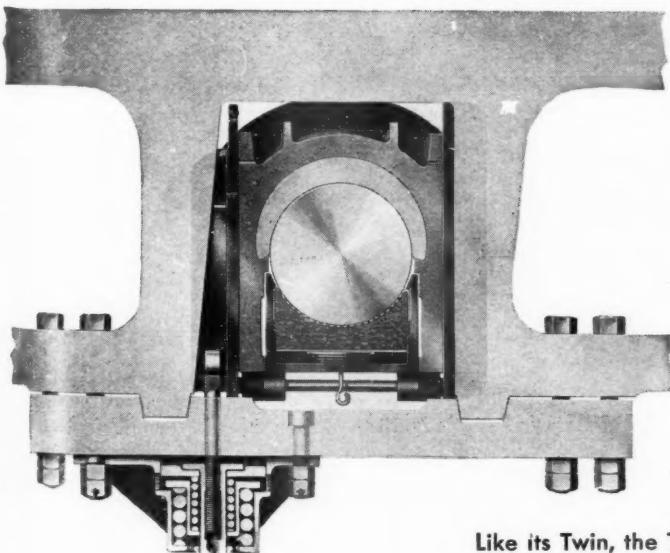
**WITH A HAND-
ADJUSTED WEDGE**



With a surface bearing, driving box temperature varies as much as 250° over short periods of time. Driving box size varies correspondingly.

No matter how perfectly the driving box wedge may be adjusted by hand, it is either too loose when the box is cold or too tight when the box expands. It cannot be right for both.

Franklin Automatic Compensator and Snubber automatically compensates for temperature change as well as wear. The wedge member automatically eases downward as the box expands and upward as it cools. The correct adjustment is always automatically maintained. The snubber member yields only to unusual shocks which avoids all possibility of excessive strains.



Like its Twin, the Type E-2 Radial Buffer, it is one of the most effective devices in maintaining proper adjustment, easy riding and low maintenance costs.

When maintenance is required a replacement part assumes importance equal to that of the device itself and should be purchased with equal care. Use only genuine Franklin repair parts in Franklin equipment.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK

CHICAGO

MONTREAL

nectady works, died on May 7, following a stroke suffered at his office the previous afternoon. After his graduation from Clarkson College of Technology in 1903 with the degree of B. S. in E. E., Mr. Delack entered the employ of the General Electric Company. In 1905 he was transferred to the railway motor engineering department at Schenectady, N. Y., and in 1912 assumed responsibility for the mechanical design of railway motors. He later served in various capacities until January, 1928, when he became manager of the Schenectady works. In 1934, because of impaired health, he asked to be relieved of the responsibilities of the position, and in October of that year he was transferred to the staff of Mr. Burrows, vice-president in charge of manufacturing.

William O. Jacquette, formerly eastern sales manager of the Pullman Company, at New York, from which position he retired about 1925, died suddenly on the links of the Englewood (N. J.) Golf Club on May 8. Mr. Jacquette was one of the pioneers in the railway supply business, having served when the Fox Pressed Steel Equipment Company was formed as its treasurer, and upon the consolidation of that company with the Schoen Pressed Steel Company to form the Pressed Steel Car Company, Mr. Jacquette was elected treasurer of the latter company, serving until 1902, when he was made general sales agent of the same company. He subsequently served with the American Steel Foundries, then with Manning, Maxwell & Moore, Inc., being at one time a vice-president of that company. He then went with the American Brake Shoe & Foundry Company as assistant to president, and later on entered the service of the Pullman Company as eastern sales manager at New York.

William A. Lake, sales manager of the Railroad and Marine departments of the Pantasote Company, Inc., New York, died on May 10 after a prolonged illness in New York. Mr. Lake entered the service of the Pantasote Company in April, 1909,



William A. Lake

in its sales department, and in May, 1924, was given charge of the railroad and marine fields for the disposition of all Pantasote and Agasote products. Mr. Lake was for years an active member of various railway clubs.

Financial

ALCOLU.—*Abandonment.*—The Interstate Commerce Commission has authorized this company to abandon as to interstate and foreign commerce its entire line between Alcolu, S. C., and Olanta, 25 miles.

BALTIMORE & OHIO.—*Bonds.*—The Interstate Commerce Commission has authorized this company to issue \$3,086,000 of refunding and general mortgage 6 per cent series E bonds upon deposit with the trustees of that mortgage of \$2,890,000 of Pittsburgh, Lake Erie & West Virginia system refunding mortgage 4 per cent bonds and \$196,000 of Baltimore & Ohio Chicago Terminal first mortgage 4 per cent bonds. The P. L. E. & W. V. bonds are authorized to be issued when \$2,000,000 of Ohio River R.R. first mortgage 5 per cent bonds and \$890,000 of Cleveland, Lorain & Wheeling general mortgage 6 per cent bonds have been deposited under the P. L. E. & W. V. mortgage. The \$3,086,000 series E issue is authorized for use as collateral for short term loans.

BOSTON & MAINE.—*P. W. A. Loan.*—The Interstate Commerce Commission has approved a Public Works Administration loan of \$2,000,000 to this company for repairs to its line incident to the recent floods in New England. The loan is to be evidenced by 4 per cent serial collateral notes maturing in installments 1937-1946, secured by \$3,600,000 of first mortgage 5 per cent series MM bonds.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—*No Quorum at Annual Meeting.*—The annual meeting of the stockholders of this company was put over for a year at Milwaukee on May 12 when a quorum failed to appear.

CHESAPEAKE & OHIO.—*Annual Report.*—The 1935 annual report of this company shows net income, after interest and other charges, of \$31,039,484, as compared with net income of \$28,062,402 in 1934. Selected items from the Income Account follow:

	1935	1934	Increase or Decrease
Average Mileage Operated	3,111.04	3,115.05	-4.01
RAILWAY OPERATING REVENUES	\$114,031,434	\$109,489,077	+\$4,542,357
Maintenance of way	11,410,299	11,043,839	+366,460
Maintenance of equipment	20,068,064	19,912,974	+155,089
Transportation	25,810,108	24,284,968	+1,525,139
TOTAL OPERATING EXPENSES	63,289,894	60,814,971	+2,474,923
Operating ratio	55.50	55.54	-0.04
NET REVENUE FROM OPERATIONS	50,741,540	48,674,106	+2,067,434
Railway tax accruals	10,680,447	10,297,986	+382,461
Railway operating income	40,054,345	38,361,751	+1,692,594
Equipment rents—Net	1,109,243	148,055	+961,188
Joint facility rents—Net	1,226,307	1,512,011	+285,704

NET RAILWAY OPERATING INCOME	39,937,281	36,997,795	+2,939,486
GROSS INCOME	40,949,005	38,051,289	+2,897,715
Rent for leased roads	38,839	36,891	+1,948
Interest on funded debt	9,726,992	9,806,272	-79,280
TOTAL DEDUCTIONS FROM GROSS INCOME	9,909,520	9,988,886	-79,366
NET INCOME	\$31,039,484	\$28,062,402	+\$2,977,082

CENTRAL OF GEORGIA.—*Annual Report.*—The 1935 annual report of this company shows net deficit, after interest and other charges, of \$2,248,198, as compared with net deficit of \$2,607,341 in 1934. Selected items from the Income Account follow:

	1935*	1934*	Increase or decrease
Average Mileage Operated	1,926.63	1,926.63
RAILWAY OPERATING REVENUES	\$14,475,544	\$13,353,151	+\$1,122,393
Maintenance of way	1,732,864	1,531,852	+201,012
Maintenance of equipment	3,093,473	2,863,368	+230,105
Transportation	5,953,668	5,354,413	+599,255
TOTAL OPERATING EXPENSES	12,224,589	11,340,897	+883,692
Operating ratio	84.45	84.93	-0.48
NET REVENUE FROM OPERATIONS	2,250,955	2,012,253	+238,701
Railway tax accruals	857,581	888,159	-30,577
Railway operating income	1,391,565	1,120,861	+270,704
Equipment rents—Net Dr.	208,502	308,312	-99,809
Joint facility rents—Net Dr.	143,553	136,866	+6,686
NET RAILWAY OPERATING INCOME	1,039,509	675,682	+363,827
Non-operating income	401,853	416,537	-14,683
GROSS INCOME	1,441,363	1,092,219	+349,144
Rent for leased roads	393,389	382,523	+10,865
Interest on funded debt	2,887,303	3,010,294	-122,990
TOTAL DEDUCTIONS FROM GROSS INCOME	3,689,561	3,699,561	-9,999
NET INCOME (deficit)	\$2,248,198	\$2,607,341	+\$359,143

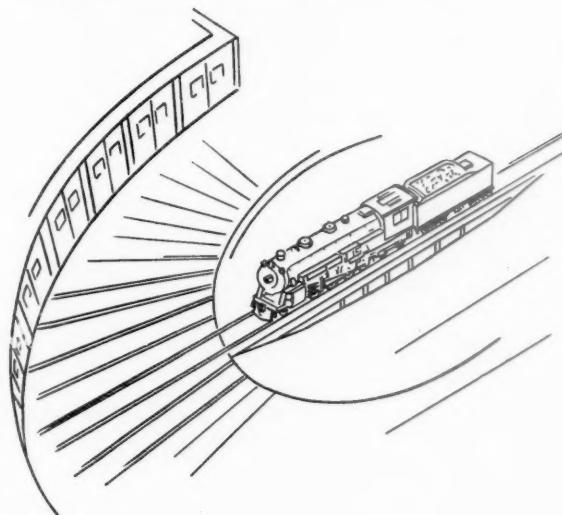
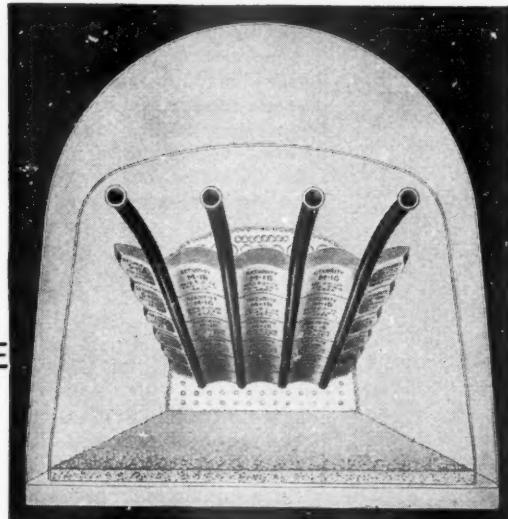
* Combined Corporate and Receivers Accounts.

COLORADO & SOUTHERN.—*Abandonment.*—Examiner J. S. Prichard of the Interstate Commerce Commission has recommended in a proposed report that the commission authorize the abandonment of this company's Denver-Leadville narrow-gauge line from Denver, Colo., to Climax, 170 miles with branches. On June 2, 1930, the commission denied the company's original application in order to determine whether or not it was possible for the line to make an improved showing during a test period of three years and on August 16, 1935, the company asked for a re-opening of the case, modifying its original application by excluding the portion of the line between Leadville and Climax, 14.83 miles. Originally the company offered to donate the line or any portion to any local interests or communities that might wish to operate it and two corporations were later formed for

Continued on next left-hand page

SECURITY ARCH BRICK IS THE FOUNDATION

of an effective economical brick arch



There's More to SECURITY ARCHES Than Just Brick

THREE is a lot to the Security Arch before it goes into the firebox.

Much of its success is due to the brick.

When we took up the development of the Security Sectional Arch we attacked the brick problem first.

Control of materials and processes

in every step in the manufacture is the foundation of arch brick performance.

Such brick cannot be made in every brick yard.

The Security Arch gives economical service.

The manufacture of the brick is one of the reasons.

**HARBISON-WALKER
REFRACTORIES CO.**

Refractory Specialists



**AMERICAN ARCH CO.
INCORPORATED**

*Locomotive Combustion
Specialists » » »*

the purpose but their applications for authority to acquire and operate the line were denied. The report points out that after six years the anticipated improvement has failed to materialize and that it has been clearly demonstrated that the line cannot be operated successfully with its present equipment, while the record is not convincing that success could be achieved if the applicant would provide new equipment.

CHICAGO & WESTERN INDIANA.—*Annual Report.*—The 1935 annual report of this company shows net income, after interest and other charges, of \$433,428, as compared with net income of \$191,671 in 1934. Selected items from the Income Statement follow:

	1935	1934	Increase or decrease
RAILWAY OPERATING REVENUES	\$103,743	\$95,252	+\$8,490
Maintenance of way	13,037	10,519	+2,518
Maintenance of equipment	54,199	357,025	-302,826
Transportation	93,054	81,639	+11,415
TOTAL OPERATING EXPENSES	167,695	459,521	-291,825
Operating ratio	161.64	482.42	-320.78
NET LOSS FROM OPERATIONS	63,952	364,268	-300,316
Railway tax accruals	626,629	666,675	-40,045
Net rents	2,377,422	2,461,114	-83,691
NET RAILWAY OPERATING INCOME	1,686,840	1,430,170	+256,670
Non-operating income	2,137,387	2,202,925	-65,538
GROSS INCOME	3,824,228	3,633,095	+191,132
Rent for leased roads	48,718	48,457	+260
Interest on funded debt	3,259,637	3,303,822	-44,184
TOTAL FIXED CHARGES	3,358,665	3,413,700	-55,035
NET INCOME	\$433,428	\$191,671	+\$241,757

CHICAGO, ROCK ISLAND & PACIFIC.—*Trustee Certificates.*—The Federal District Court at Chicago on May 6 authorized the trustees of the Rock Island to petition the Interstate Commerce Commission for authority to issue \$4,500,000 of trustee certificates for maintenance purposes. The trustees have arranged to sell most of the certificates to the First National Bank of Chicago at 3½ per cent interest.

CHICAGO, BURLINGTON & QUINCY.—*Two Directors Resign.*—At the annual meeting of the company on May 6, the by-laws were amended to provide for a board of directors of 15, a reduction of two. Robert E. Wood, president of Sears, Roebuck & Company, and Charles O. Jenks, St. Paul, Minn., resigned from the board, thereby reducing the number of directors to 15.

CHICAGO, BURLINGTON & QUINCY.—*Annual Report.*—The 1935 annual report of this company shows net income, after interest and other charges, of \$1,842,843, as compared with net income of \$4,454,760 in 1934. Selected items from the Income Statement follow:

	1935	1934	Increase or Decrease
RAILWAY OPERATING REVENUES	\$82,925,208	\$80,288,159	+\$2,637,049

Maintenance of way	10,824,581	9,860,326	+964,255
Maintenance of equipment	14,950,519	12,431,389	+2,519,130
Transportation	30,844,331	28,564,565	+2,279,766
TOTAL OPERATING EXPENSES	62,544,383	58,007,982	+4,536,401
Operating ratio	75.42	72.25

NET REVENUE FROM OPERATIONS	20,380,824	22,280,176	-1,900,52
Railway tax accruals	5,983,920	5,783,596	200,324
Railway operating income	14,373,675	16,471,456	-2,097,781
Hire of equipment—Net	1,954,134	1,679,712	+274,422
Joint facility rents—Net	2,191,186	2,140,808	+50,378

NET RAILWAY OPERATING INCOME	10,228,354	12,650,936	-2,422,582
Non-operating income	1,080,893	1,254,168	-173,275
GROSS INCOME	11,309,248	13,905,104	-2,595,856

Rent for leased roads	152,691	150,541	+2,150
Interest on funded debt	9,084,635	9,084,635
TOTAL FIXED CHARGES	9,428,159	9,414,721	+13,438

NET INCOME	\$1,842,843	\$4,454,760	-\$2,611,917
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FLORIDA EAST COAST.—*Annual Report.*—The 1935 annual report of this road shows net deficit, after interest and other charges, of \$3,222,759, as compared with net deficit of \$2,806,591 in 1934. Selected items from the Income Account follow:

	1935	1934	Increase or decrease
Average Mileage Operated	779.02	821.52	-42.50
RAILWAY OPERATING REVENUES	\$7,729,028	\$7,609,611	+\$119,417
Maintenance of way	1,430,913	1,336,501	+94,412
Maintenance of equipment	1,676,884	1,594,653	+82,231
Transportation	2,733,525	2,388,842	+344,682
TOTAL OPERATING EXPENSES	6,694,207	6,142,287	+551,920

NET REVENUE FROM OPERATIONS	1,034,820	1,467,323	-432,502
Railway tax accruals	805,364	766,762	+38,599
Railway operating income	228,695	700,041	-471,345
Equipment rents	429,313	421,444	+7,869
Net Dr.	21,974	53,120	-31,146
NET RAILWAY OPERATING INCOME (Deficit)	22,592	225,475	-448,068
Non-operating income	84,761	72,915	+11,845

GROSS INCOME (Deficit)	137,831	298,391	-436,223
Interest on funded debt	2,966,354	3,012,453	-46,099
NET INCOME	\$3,222,759	\$2,806,591	-\$416,167

DENVER & RIO GRANDE WESTERN.—*R. F. C. Loan.*—The Interstate Commerce Commission has authorized the trustees of this company to permit the sale by highway subsidiaries, stock of which is deposited as collateral with the Reconstruction Finance Corporation, of \$125,000 of bonds of the federal government to supply cash needed for the purchase of six buses, two trucks and franchises for freight operation from South Fork, Colo., to Durango.

KANSAS CITY SOUTHERN.—*New Directors.*—Dwight S. Brigham and J. A. McDonough of Boston, and Kenneth D.

Steere and Edward M. Allen of New York were elected to the directorate of this company at the annual meeting on May 12 in Kansas City.

MARYLAND & PENNSYLVANIA.—*R. F. C. Loan.*—The Interstate Commerce Commission has authorized a further loan of \$100,000 by the Reconstruction Finance Corporation to this company to meet maturing bonds, and an extension for two years of a loan of similar amount which matured May 1. The Commission has authorized the Maryland & Pennsylvania Terminal Ry. Co. to issue \$200,000 of extended first mortgage bonds in exchange for a similar amount of bonds which matured May 1, the issue to be guaranteed by the parent company.

MINNEAPOLIS & ST. LOUIS.—*Receivers' Certificates.*—The Interstate Commerce Commission has authorized the receivers of this company to issue \$1,185,000 of receivers' certificates to extend or renew a like amount of maturing certificates.

MINNEAPOLIS & ST. LOUIS.—*Abandonment.*—The Interstate Commerce Commission has modified its certificate authorizing the trustees of this company to abandon its line between Spencer, Iowa, and Storm Lake, 36.9 miles, to provide for abandonment of operation only of that part of the line extending from Greenville southerly to the crossing of the Rock Island, 2 miles.

MINNEAPOLIS & ST. LOUIS.—*Acquisition.*—A hearing was begun before a subcommittee of the Senate committee on interstate commerce on May 13 on a resolution proposed by Senator Benson, of Minnesota, calling for a senatorial investigation of the proposed dismemberment of the M. & St. L. and sale of parts of its line to the Associated Railways. The first witness was O. E. Sweet, director of the Bureau of Finance of the Interstate Commerce Commission, who explained the commission's procedure on applications for authority to acquire or abandon lines.

MINNESOTA TRANSFER.—*Bonds.*—This company has applied to the Interstate Commerce Commission for authority to issue \$2,000,000 of first mortgage 3½ per cent bonds to redeem, on August 1, 5 per cent bonds at 102½.

MISSOURI PACIFIC.—*Counsel Fees.*—The Interstate Commerce Commission has authorized payment of \$25,000 in fees and \$3,502 in expenses for trustees of the St. Louis, Iron Mountain & Southern, River & Gulf divisions, first mortgage for services in connection with gold clause litigation arising under this mortgage.

MISSOURI PACIFIC.—*Reorganization.*—The Bureau of Finance of the Interstate Commerce Commission has recommended in a proposed report that the commission deny the application of Charles H. Thornton, James M. Kemper, and A. J. Sevin for an order authorizing them, as a protective committee for the holders of certain junior securities of the Missouri Pacific, to solicit authorizations to represent holders of such securities, in connection with plans for the company's reorganization. The report says that the idea of the

THE SUPERHEATER COMPANY

NEW YORK



CHICAGO

ELESCO MACHINE-FORGED

RETURN BENDS AND BALL ENDS

*are of one piece with the tubing from
which they are forged*



NEW YORK
60 East 42nd St.

MONTREAL
The Superheater Co., Ltd.
Dominion Square Bldg.

CHICAGO
Peoples Gas Bldg.

REPRESENTATIVE OF AMERICAN THROTTLE COMPANY, INC.

formation of this protective committee originated with Robert E. Smith, of Portland, Ore., chairman of the Conference of Western Owners of Property and Investments, and his associates, and that the matter was discussed with officers of the Missouri Pacific at a conference at which O. P. Van Sweringen was also present. It is also stated that "representation by the committee of both stocks and bonds, in accordance with the authority requested in its application, might involve a conflict of interest which would be objectionable to some of the security holders and embarrass the committee in the performance of its functions as such."

NEW YORK CENTRAL.—*Acquisition.*—The Interstate Commerce Commission has authorized this company to acquire and merge with itself the Genesee Falls Railway (1.9 miles of industrial tracks in Rochester, N. Y.).

NEW YORK CENTRAL.—*Trackage Rights Abandonment.*—The Interstate Commerce Commission has authorized this company and the Evansville, Indianapolis & Terre Haute to abandon operation under trackage rights over the Southern from Oakland City, Ind., westerly for 7.1 miles, and to abandon appurtenant lead and side tracks.

NEW YORK, CHICAGO & ST. LOUIS.—*Annual Report.*—The 1935 annual report of this company shows net income, after interest and other charges, of \$1,115,929, as compared with net income of \$58,633, in 1934. Selected items from the Income Account follow:

	1935	1934	Increase or Decrease
RAILWAY OPERATING REVENUES	\$34,243,513	\$33,143,864	+\$1,099,648
Maintenance of way	3,557,669	3,511,251	+46,417
Maintenance of equipment	4,999,432	4,899,699	+99,732
Transportation	11,797,651	11,636,920	+160,731
TOTAL OPERATING EXPENSES	23,107,185	22,692,256	+414,929
Operating ratio	67.48	68.46	-0.98
NET REVENUE FROM OPERATIONS	11,136,327	10,451,608	+684,719
Railway tax accruals	1,334,323	1,676,056	-341,732
Railway operating income	9,793,941	8,770,784	+1,023,157
Equipment rents—Net	2,574,691	2,779,654	+204,962
Joint facility rents—Net	459,702	481,702	+21,999
NET RAILWAY OPERATING INCOME	6,759,546	5,509,427	+1,250,119
GROSS INCOME	8,650,491	7,588,975	+1,061,515
Rent for leased roads	3,531	39,967	-36,435
Interest on funded debt	7,462,330	7,421,693	+40,637
TOTAL DEDUCTIONS FROM GROSS INCOME	7,534,562	7,530,341	+4,220
NET INCOME	\$1,115,929	\$58,633	+\$1,057,295

PITTSBURGH & WEST VIRGINIA.—*Equipment Trust Certificates.*—The Interstate Commerce Commission has authorized this company to assume liability for \$2,000,000 equipment trust 3½ per cent certificates of 1936, maturing 1937-1946, to be sold to the highest bidder (A. G. Becker & Co.) at 97.75, making the average interest cost

approximately 3.97 per cent. The company has also been authorized to withdraw \$500,000 of equipment trust certificates of 1935 from collateral on deposit with the Reconstruction Finance Corporation. The purpose of this series of transactions is to retire all outstanding 1926 equipment trust certificates; reduce R. F. C. loans by \$750,000, Railroad Credit Corporation loans by \$300,000 and bank loans by \$250,000.

PENNSYLVANIA.—*Abandonment.*—The Interstate Commerce Commission has authorized this company to abandon 11 short branches and segments of line, totaling 20.2 miles, in Clearfield, Cambria, Somerset, Allegheny, Center and Clarion counties, Pa.—most of which are spurs serving coal lands and none of which have incorporated communities located upon them.

ROCK ISLAND LINES.—*Annual Report.*—The 1935 annual report of the Chicago, Rock Island & Pacific and its subsidiary companies shows net deficit, after interest and other charges, of \$15,024,425, as compared with net deficit of \$12,100,691 in 1934. Selected items from the Income Account follow:

	1935	1934	Increase or Decrease
RAILWAY OPERATING REVENUES	\$67,116,854	\$66,961,688	+\$155,165
Maintenance of way	8,338,437	7,297,779	+1,040,658
Maintenance of equipment	10,548,164	10,220,604	-30,399
Transportation	29,278,539	27,491,219	+1,787,319
TOTAL OPERATING EXPENSES	59,830,489	56,875,188	+2,955,300
Operating ratio	89.14	84.94	+4.20
NET REVENUE FROM OPERATIONS	7,286,364	10,086,499	-2,800,134
Railway tax accruals	4,160,000	4,355,000	-195,000
Railway operating income	3,096,740	5,704,724	-2,607,983
Equipment rents—Net	2,924,879	2,926,626	-1,747
Joint facility rents—Net	1,111,059	1,099,298	+11,760
NET RAILWAY OPERATING INCOME	* 939,197	1,678,799	-2,617,997
Non-operating income	545,733	495,531	+50,202
GROSS INCOME	* 393,463	2,174,331	-2,567,794
Rent for leased roads	155,286	155,286	
Total interest	14,419,244	14,050,921	+368,322
NET INCOME (deficit)	\$15,024,425	\$12,100,691	-\$2,923,734

* Deficit.

TRINITY VALLEY SOUTHERN.—*Abandonment.*—This company has applied to the Interstate Commerce Commission for authority to abandon its line from Dodge, Tex., to Oakhurst, 5.92 miles.

UNION TRANSFER.—*Acquisition.*—The Interstate Commerce Commission has authorized the Chicago, Milwaukee, St. Paul & Pacific to intervene as a party to the proceedings on the application of the Union Pacific, the Chicago, Burlington & Quincy, and the Chicago & Northwestern for authority to acquire control of the Union Transfer Company.

WHEELING & LAKE ERIE.—*Proposal to Increase Capital Stock.*—A special meeting of the stockholders of this company has been called for May 27 at which a proposal will be submitted to increase the

authorized capital stock by \$16,000,000 of 4½ per cent convertible prior lien or first preferred stock.

Average Prices of Stocks and of Bonds

	Last	Last
	May 12	year
Average price of 20 representative railway stocks..	44.90	44.97
Average price of 20 representative railway bonds..	78.52	78.52
	73.32	

Dividends Declared

Alabama Great Southern.—Preferred, 3 per cent, payable August 15 to holders of record July 13.

Albany & Susquehanna.—\$4.50, semi-annually, payable July 1 to holders of record June 15.

Boston & Albany.—\$2.50, payable June 30 to holders of record May 30.

Cincinnati, New Orleans & Texas Pacific.—5 per cent Preferred, \$1.25, quarterly, payable June 1 to holders of record May 15.

Cincinnati Northern.—\$6.00, semi-annually, payable July 31 to holders of record July 21.

Detroit, Hillsdale & Southwestern.—\$2.00, payable July 1 to holders of record June 20.

Illinois Central.—Leased Line.—\$2.00, payable July 1 to holders of record June 11.

Portland & Ogdensburg.—Guaranteed, 43c, payable May 31 to holders of record May 20.

Rutland & Whitehall.—\$1.50, payable May 15 to holders of record May 1.

West Jersey & Seashore.—6 Per Cent Special Guaranteed, \$1.50, payable June 1 to holders of record May 15.

Construction

ERIE.—A Revised estimate of cost of \$342,700 for the elimination of the Pike street crossing of this road in Port Jervis, N. Y., has been approved by the New York Public Service Commission. The commission also amended a previous order to permit the railroad company to do certain work at actual cost in connection with the elimination, without contract, at a cost of \$105,450. See *Railway Age*, March 7, page 415.

LOUISVILLE & NASHVILLE.—The Kentucky State Highway department has awarded a contract to the Henry Bickel Company, Louisville, Ky., for the elevation of the double-track line of the L. & N. for a distance of about 8,200 ft. through the city and for the construction of street subways at Baxter avenue, Walnut street, Broadway, Brent street and Breckenridge street. The work involved in the contract, which is to be financed largely with government funds, also includes the construction of elevated platforms, sheds, stairways, and a baggage elevator at the Baxter Avenue station and the construction of the floor of the station. The station building proper is to be constructed by the railroad at its own expense. The elevated line is to be carried on a concrete pile trestle for about 5,000 ft., on a structure of concrete slab and pier construction for about 1,100 ft., and on earth embankment approaches at the ends. Bridges across the streets will consist of steel girder spans, with concrete fascia girders, on concrete abutments, pedestrian sidewalks being carried through the abutments. Funds amounting to \$1,140,625 have been provided by the federal government for this project. All costs in excess of this amount and the cost of right of way and property damages are to be shared by the railroad (65 per cent) and the city (35 per cent).

Continued on next left-hand page



*High-Speed Beyer-Garratt Locomotive built for the Algerian Railway
Standard Gauge — Total Weight, 425,000 lb. — Tractive Power, 58,100 lb.*

AMERICAN LOCOMOTIVE COMPANY

DURING 1932 a Beyer-Garratt locomotive was built by the Societe Franco-Belge de Materiel des Chemins de Fer to the designs of Beyer-Peacock & Company, Ltd. of England for express passenger service on the Algerian Railway Under test this locomotive attained a speed of 81 m.p.h., constituting a world's record for an articulated engine Such performance, together with the general test results, so conclusively demonstrated the utility of this engine for the service that 12 similar engines were ordered.

One of the new series on its first trial trip attained a speed of 75 m.p.h. at 4 per cent cut-off And, as an indication of its free running and low internal resistance, over 60 m.p.h. (light engine) has been maintained for a distance of 5 km. on practically level track with steam shut off.

The American Locomotive Company has the sole and exclusive right to manufacture and sell this type of equipment in the United States and Canada.

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ALCO

Railway Officers

EXECUTIVE

Fred G. Gurley, whose appointment as assistant vice-president (operation) of the Chicago, Burlington & Quincy, with headquarters at Chicago, was noted in the *Railway Age* of May 2, has been connected with this company continuously for about 32 years. In 1915 he was appointed trainmaster and served in this capacity at various points for about four years, then being assigned to special work on the staff of the general manager and vice-president. In 1920 he was advanced to division superintendent and after five years in this position he was further promoted to general superintendent. On May 1, 1932, he was appointed assistant to the operating



Fred G. Gurley

vice-president, his title being changed to assistant to the executive vice-president on April 1, 1935. He was holding this position at the time of his recent appointment as assistant vice-president (operation), which was effective on May 1.

H. C. Murphy, whose appointment as assistant to the executive vice-president of the Chicago, Burlington & Quincy, was noted in the *Railway Age* of May 2, was born on August 27, 1892, at Canton, Ill., and received his higher education at Iowa State College, Ames, Iowa, and at the Armour Institute of Technology, Chicago. Mr. Murphy's first railway service was with the Minneapolis & St. Louis; during the early years of his career he also engaged in municipal and highway engineering work in Iowa. He entered the service of the Burlington on July 13, 1914, as a clerk in the auditor's office at Chicago, later entering the engineering department as a rodman at La Crosse, Wis. During the winter of 1915-16 he continued his studies at Ames, then returning to the Burlington as an instrumentman at Chicago. During the war he served as a pilot in the United States Army Air Service, returning to the Burlington in 1919 as an assistant engineer at Centralia, later holding the positions of acting division engineer at Centralia, division engineer at

Kansas City, Mo., and division engineer and roadmaster at the latter point. In



H. C. Murphy

August, 1923, Mr. Murphy was appointed assistant engineer maintenance of way at Alliance, Neb., and in April of the following year he was appointed district engineer maintenance of way at Galesburg, Ill. In February, 1925, he was sent to Lincoln, Neb., as engineer maintenance of way and after two years in this position he was appointed transportation assistant to the general manager, Lines West, at Omaha, Neb., being transferred to Chicago in October, 1928. In April, 1929, Mr. Murphy was appointed superintendent and served in this capacity and as assistant superintendent at various points until August, 1933, when he was appointed superintendent of safety, with headquarters at Chicago, the position he was holding at the time of his recent promotion to assistant to executive vice-president.

FINANCIAL, LEGAL AND ACCOUNTING

A. E. Woodhouse has been appointed auditor of disbursements of the Florida East Coast, with headquarters at St. Augustine, Fla., succeeding **J. L. McCarty**, deceased.

OPERATING

P. F. Buckle, assistant to the superintendent of safety of the Chicago, Burlington & Quincy, with headquarters at Chicago, has been promoted to superintendent of safety, succeeding **H. C. Murphy**, whose appointment as assistant to the executive vice-president was noted in the *Railway Age* of May 2. **T. K. Gage**, a conductor on the Aurora division, has been promoted to assistant superintendent of safety, succeeding Mr. Buckle. The appointment of Mr. Buckle became effective on May 1, and that of Mr. Gage on May 16.

William Richard Triem, whose appointment as general superintendent of telegraph of the Pennsylvania at Philadelphia, Pa., was noted in the *Railway Age* of May 9, was born at Allegheny, Pa., on October 21, 1886. Mr. Triem attended the public schools of Alliance, Ohio, and

was graduated from Ohio State University in 1910 with the degree of Civil Engineer. He entered the service of the Pennsylvania on June 5, 1910, as an assistant on the engineer corps, Marietta division, and on March 31, 1912, he was transferred in the same capacity to the Toledo division. Mr. Triem was appointed assistant division engineer of the Akron division on June 30, 1916, and on May 25, 1920, he was transferred in the same capacity to the Logansport division. On March 1, 1924, he was promoted to assistant trainmaster of the Toledo division and on September 16, 1926, he was transferred in the same capacity to the Pittsburgh division. He was promoted to trainmaster of the Renovo division on March 10, 1927, and became freight trainmaster of the Panhandle division on June 21, 1927. He was appointed superintendent of the Buffalo division on February 15, 1928, and superintendent of freight transportation, Central region, on July 1, 1928.



W. R. Triem

Mr. Triem became superintendent of the Monongahela division at Pittsburgh on September 16, 1933.

Samuel F. Knowles, superintendent of the Alabama division of the Railway Express Agency at Birmingham, Ala., has been appointed general manager of the Gulf department at Atlanta, Ga., succeeding **Harvey M. Smith**, who has retired.



Samuel F. Knowles

B. W. Hendricks, superintendent of the Georgia division at Atlanta, has been ap-



MOTORISTS and highway authorities have complained about delays caused by slow-speed trains approaching highway crossings. The cause of most of these complaints may now be eliminated by installation of the "UNION" UNIFORM TIME CONTROL SYSTEM. Under this system any type of automatic crossing protective device may be timed uniformly,

whether the speed of an approaching train be 10 or 110 miles per hour! For use on single or multiple track lines, this system measures the speed of the train before it passes the point which would permit the minimum warning time at maximum speed. Details of this modern highway crossing protective improvement are available at our nearest district office.

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pointed superintendent of the Alabama division, succeeding Mr. Knowles. **S. F. Pitcher**, general agent at Atlanta, has been appointed superintendent of the Georgia division, succeeding Mr. Hendricks. **W. M. Mathews**, agent at Chattanooga, Tenn., has been appointed general agent at Atlanta, succeeding Mr. Pitcher and **John I. Dale**, agent at Knoxville, Tenn., has been transferred to Chattanooga, succeeding Mr. Mathews. Mr. Knowles entered the express business as messenger in the Georgia division, and twelve years later he became correspondent and trace clerk in the Atlanta office. In March, 1904, he became agent at Shreveport, La., and two years later he was appointed chief clerk to the superintendent at Chattanooga. He was next appointed successively route agent, agent at Chattanooga, and superintendent at that city. Mr. Knowles went to Birmingham as superintendent of the Alabama division in 1919, where he served until his recent appointment. His entire service has been in the Gulf department and he has never been employed by any company other than the



Harvey M. Smith

Railway Express Agency and its predecessor companies.

Mr. Smith entered the express business as a clerk in the office at Opelika, Ala., in October, 1884. He served successively as acting agent at Selma, Ala., messenger between Rome, Ga., and Meridian, Miss., cashier at Atlanta, chief clerk to the agent at Knoxville, Tenn., solicitor at Roanoke, Va., and chief clerk to the superintendent at Roanoke. Mr. Smith then became route agent, serving three years at Roanoke and two years at Bluefield, W. Va. He was transferred to Atlanta in February, 1903, to take over the agency and, after serving for five years, he became superintendent of the Georgia division in July, 1908, which position he held with three different companies. He was appointed general manager of the Gulf department in September, 1931, in which capacity he served until his retirement.

Mr. Hendricks began his career as a clerk in a railroad office at Jackson, Ga., where considerable express was handled, and later represented both the railroad and the express company as joint agent at that point. In October, 1899, he became clerk at the express office at Brunswick, Ga.,

and, after three years as messenger, he was transferred to Cedartown as agent, later going to the Brunswick agency. He was assigned to the superintendent's office in Chattanooga, Tenn., in January, 1908,



B. W. Hendricks

two years later being transferred to route agency work at Atlanta, and then in Chattanooga. Mr. Hendricks was assigned to the general manager's office at Birmingham in December, 1914, and five years later he was appointed superintendent at Chattanooga. In May, 1921, he returned to Atlanta, serving as route agent for five months until he became assistant superintendent of the Georgia division at that city. In January, 1927, he was appointed acting superintendent of the Seminole division at Jacksonville, Fla., and in July of that year he became superintendent. He returned to Atlanta in May, 1934, as superintendent of the Georgia division, the position he held until his recent appointment.

Mr. Pitcher spent his first eleven years in the express business at Chattanooga, during which time he held twenty different positions. He went overseas with the A.E.F. in August, 1918, and in July of the following year he returned to the service. Mr. Pitcher became route agent at Atlanta



S. F. Pitcher

in September, 1924, and about a year later he became terminal agent. In 1930 he became general agent at Atlanta, the position he held until his recent appointment as superintendent of the Georgia division.

TRAFFIC

Fred C. Franklin has been appointed general agent, freight department, New York Central System, with headquarters at Houston, Tex., succeeding **John L. Carleton**, transferred.

ENGINEERING AND SIGNALING

G. R. Haworth, whose appointment as engineer maintenance of way of the Western Maryland at Baltimore, Md., was noted in the *Railway Age* of April 18, was born on June 25, 1888, at Philipsburg, Pa. He entered railway service in June, 1905, and, after brief service on two small roads he went in 1907 with the Erie. Later in the same year he left railroad service and was associated successively with W. H. Woodcock & Company and the Atlantic, Gulf & Pacific Dredging Company. Returning to the Erie in 1908 he remained until the following year, when he was for a short time employed by the V. DeGeronimo Construction Company, Pittsburgh, Pa., before becoming associated with the Chicago, Burlington & Quincy. During 1910 he served with the Colorado & Southern and in government service. In 1911 he became affiliated with the Western Maryland, where he has since remained, being division engineer at Cumberland, Md., at the time of his recent appointment as engineer maintenance of way.

MECHANICAL

H. H. Urbach, superintendent of motive power of the Chicago, Burlington & Quincy Lines West of the Missouri river, with headquarters at Havelock, Neb., has been promoted to mechanical assistant to the executive vice-president, with headquarters at Chicago, succeeding **J. H. Reisse**, who has retired. **C. E. Melker**, master mechanic at Hannibal, Mo., has been promoted to superintendent of motive power at Havelock, to replace Mr. Urbach.

SPECIAL

Dr. T. L. Hansen, assistant chief surgeon of the Chicago, Rock Island & Pacific, has been appointed chief surgeon, with headquarters as before at Chicago, succeeding **Dr. S. C. Plummer**, who has been appointed consulting surgeon. These appointments became effective on May 1.

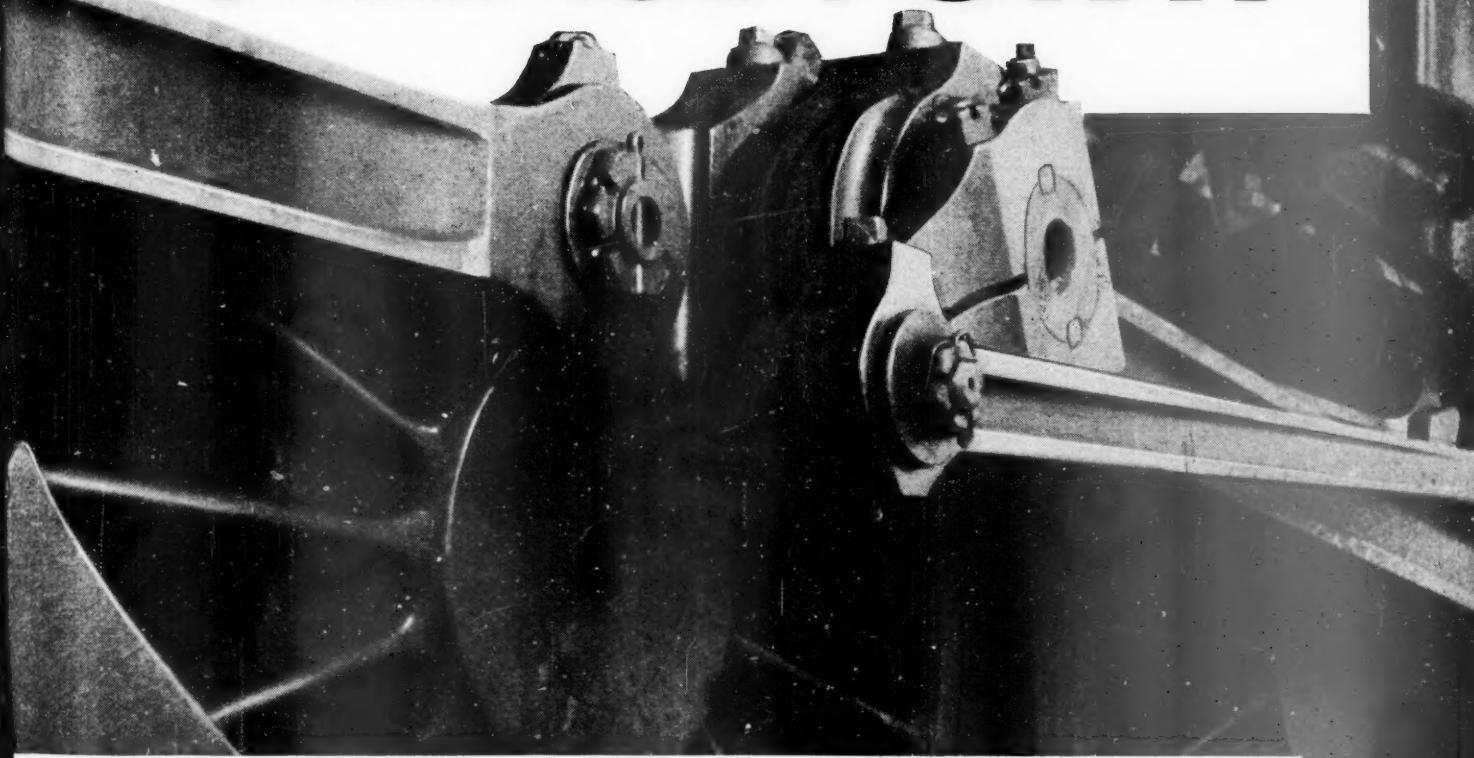
OBITUARY

S. S. Riegel, mechanical engineer of the Delaware, Lackawanna & Western, with headquarters at Scranton, Pa., died suddenly in Buffalo, N. Y., on May 12 of a heart attack.

Charles Jensch, comptroller of the Chicago & North Western and the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at Chicago, died suddenly on May 9 while on a business trip to St. Paul, Minn. Mr. Jensch was born on May 6, 1873, at Milwaukee, Wis., and

Continued on next left-hand page

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entered railway service on July 1, 1890, as an office boy with the Chicago, St. Paul, Minneapolis & Omaha. He was advanced successively through various positions until May, 1910, when he was promoted to general auditor. In May, 1916, Mr. Jensch was further advanced to comptroller, which position he held until his death except for a period during the World War when he served as federal auditor. On January 1, 1929, he was appointed also comptroller of the Chicago & North Western, with headquarters at Chicago.

W. C. Loree, former general manager of the Baltimore & Ohio Southwestern and the Cincinnati, Hamilton & Dayton (now part of the Baltimore & Ohio), died on May 6 at his apartment in the Hotel McAlpin, New York. Mr. Loree, who was a brother of L. F. Loree, president of the

Delaware & Hudson, was in his 76th year. He was born on October 15, 1860, at Newark, N. J., and entered railway service in 1883 in the engineering department of the Chicago, St. Louis & Pittsburgh (Pennsylvania Lines West of Pittsburgh), and held various positions in that department until February, 1887, when he became assistant engineer maintenance of way of the Cincinnati division of the Pittsburgh, Cincinnati & St. Louis (Pennsylvania Lines West of Pittsburgh). In October, 1889, he became engineer maintenance of way of the Chicago division of the Pittsburgh, Cincinnati, Chicago & St. Louis; in November, 1894, engineer maintenance of way of the Indianapolis division and in March, 1899, superintendent of the Indianapolis division. In December, 1902, he was appointed superintendent of the Chicago division of the Baltimore & Ohio and in

April, 1903, general superintendent of the Pittsburgh system of that road. He became general superintendent of the Wheeling system of the B. & O. in January, 1905; and general superintendent at Pittsburgh, Pa., in May, 1910. Mr. Loree was appointed general manager of the Cincinnati, Hamilton & Dayton in March, 1911, and in May, 1912, he became also general manager of the Baltimore & Ohio Southwestern, from which positions he resigned on March 1, 1914. Since his retirement he has served as director of a number of companies, including the Kansas City Southern.

John L. McCartney, auditor of disbursements of the Florida East Coast, with headquarters at St. Augustine, Fla., died on April 24 in a hospital at St. Augustine, following an extended illness.

The Value of Railroads Versus Trucks to Communities

The following letter by Fred W. Sargent, president of the Chicago & North Western, appeared in the Chicago Journal of Commerce, in answer to a letter in that paper.

"Under recent date in Outstanding Comment, under the title of 'Answering a Popular Notion,' you published an article by M. S. Hartman, part of which reads as follows:

"We were waited upon by a representative of the Wahoo Chamber of Commerce, an organization of business men of that community. They advised that prior to 1929 they had one local drayman, and this railroad had one agent, usually a single man. At the best, there were two families in the city supported by rail transportation employment.

"As opposed to this there were now 17 families who received their income from the operation of trucks. These in part supported service and filling stations, so that in fact the transportation of property is, insofar as this place is concerned, now providing employment for the heads of at least 20 families.

"The foregoing, illustrative of local employment in transportation, and thus the transport needs of industry and our people, is no doubt typical of conditions throughout the nation. It is difficult to secure statistics in relation to motor vehicle transportation employment because of its being of recent and rapid growth."

"The town is served by three of the major railroad lines of Nebraska, the Chicago and North Western, the Chicago, Burlington and Quincy, and the Union Pacific. These railroads employ 15 men in active service and one pensioner who live in Wahoo, and there spend their annual wage income of \$17,773 with the business houses of the town.

"These three lines pay taxes to Saunders County, of which Wahoo is the county seat, in an aggregate amount of \$49,691 per year. During the forty

years in which it has grown to a population of 2,689 in 1930, these three railroads have furnished transportation for this town. They have also served the agricultural area contiguous thereto, giving access to markets for the farmers' produce, which is the chief wealth of the community. Farm products to the value of millions of dollars have been transported from this point to market during this period. Every car load of live stock shipped out brings from \$1,500 to \$2,000 in cash into the community; every carload of corn, \$600 to \$800; and every car of wheat, \$1,000 to \$1,400. These commodities, through the early years would have been practically valueless without the adequate transportation furnished by the railroads.

"Products of the industries located in Wahoo add substantially to its income. It is estimated that these industries dispense \$80,000 in wages to their employees every year. Practically all of the development of industry occurred as a result of rail transportation and long before the trucks became a real factor in this field. In the matter of the necessities of life, required by the community and consisting of manufactured articles, food, clothing, fuel, lumber and other building materials and equipment for home and factory, which have been brought in by rail transportation during the years, it is plain that the community is indebted to the railroads for the life, health and comfort of its people.

"Motor trucks have now entered and found a place in the transportation system. The thing that here concerns us is the contribution of the motor carriers to the economic life of Wahoo.

"The representative of the chamber of commerce claimed that there were 17 trucks and altogether 20 families supported by the truck operations.

"Inquiry develops that there are trucks owned by residents operating in Wahoo as follows: In common carrier service.. 4 trucks

In contract carrier service.. 2 trucks
In local service, by merchants,
dairymen, draymen, etc.... 22 trucks

"It thus appears that 22 trucks are profiting by the existence of rail service and but six trucks are engaged in what may be termed competition with the railroads and properly includable in this discussion. Statistics regarding their operation are not available, but it seems that a very liberal estimate of the wages and other operating costs if all spent in Wahoo could not exceed more than \$2,000 each or contribute more than \$12,000 annually to the economic life of the city.

"Further facts regarding the trucks are as follows:

(a) The license fees and taxes paid by these trucks go to the state treasury and do not go to the support of local government.

(b) The trucks have the use of expensive highways constructed by the taxayers.

(c) They have not been instrumental in bringing any new industry to the city.

(d) They have brought no new wealth to the community.

(e) They have provided transportation, so far, only to nearby markets and are limited in usefulness both as to the territory they serve and also as to the commodities they can handle.

(f) There is no distinct proof that they are either necessary or desirable from an economic point of view except in local service supplementing and co-ordinating with railroad service.

"In conclusion:

"Railroad transportation has been an indispensable factor in the development of our western states. Their prosperity has been dependent wholly upon this means of transportation and they have been amply served. It would seem prudent that intelligent citizens, especially farmers and merchants, would be diligent in fostering those instrumentalities which have contributed so largely to their success."

Annual Report of the New York Central Railroad Company

To the Stockholders of

THE NEW YORK CENTRAL RAILROAD COMPANY:

The Board of Directors herewith submits its report for the year ended December 31, 1935, with statements showing the income account and the financial condition of the company.

The Year's Business

Operating revenues amounted to \$310,192,979.54, an increase of \$15,108,098.25 (5.12%).

Revenue freight handled amounted to 104,482,468 tons, an increase of 4,617,357 tons (4.62%). Freight revenues, which include \$7,180,326 resulting from the emergency charges authorized by the Interstate Commerce Commission (in Ex Parte No. 115), amounted to \$218,260,324.49, an increase of \$14,105,250.91 (6.91%).

While there was a decrease in the tonnage of the products of agriculture and of animals and animal products, there were substantial increases in tonnage in other groups.

Some of the commodities in which the larger increases occurred with increased gross revenue (before deductions for switching charges, absorbed overcharges, etc.) therefrom, were:

	Tons	Increase	Revenue	Increase
Bituminous coal	46,353,131	1,267,392	\$54,020,521	\$3,042,754
Iron ore	2,736,095	845,920	1,367,047	351,054
Products of mines*	2,670,306	327,961	3,130,985	486,608
Lumber, shingles and lath	1,407,384	356,750	3,263,146	826,985
Iron and steel articles rated 5th class	3,134,576	712,265	9,585,536	2,721,838
Automobiles, auto trucks and parts	2,192,103	539,812	15,619,895	3,860,838
Manufactures and miscellaneous*	8,956,987	692,388	33,333,992	4,993,629

* Not otherwise specified.

The company carried 44,381,459 revenue passengers, a decrease of 1,114,350 (2.45%). Interline passengers increased 9,796 (0.52%), while local passengers decreased 768,649 (6.26%) and commutation passengers decreased 355,497 (1.14%). Revenue from passengers amounted to \$55,292,023.51, an increase of \$539,411.72 (0.98%).

Net railway operating income was \$36,748,524.01, an increase of \$7,587,595.90.

Net income for the year was \$115,045.54, which was carried to the credit of profit and loss.

Income Account for the Year

Including Boston & Albany Railroad, Ohio Central Lines, Michigan Central Lines, Big Four Lines, and All Other Leased Lines				
	Year ended Dec. 31, 1935	Year ended Dec. 31, 1934	+Increase or -Decrease	
OPERATING INCOME	11,214.92 miles operated	11,399.04 miles operated	-184.12 miles	
RAILWAY OPERATIONS				
Railway operating revenues	\$310,192,979.54	\$295,084,881.29	+\$15,108,098.25	
Railway operating expenses	237,197,454.76	224,171,759.94	+13,025,694.82	
NET REVENUE FROM RAILWAY OPERATIONS	\$72,995,524.78	\$70,913,121.35	+\$2,082,403.43	
Percentage of expenses to revenues	(76.47)	(75.97)	+(50)	
Railway tax accruals	\$20,619,431.57	\$24,836,981.06	-\$4,217,549.49	
Uncollectible railway revenues	162,208.42	178,056.42	-15,848.00	
RAILWAY OPERATING INCOME	\$52,213,884.79	\$45,898,083.87	+\$6,315,800.92	
Equipment rents, net debit	\$11,676,501.48	\$11,980,672.52	-\$304,171.04	
Joint facility rents, net debit	3,788,859.30	4,756,483.24	-967,623.94	
NET RAILWAY OPERATING INCOME	\$36,748,524.01	\$29,160,928.11	+\$7,587,595.90	
MISCELLANEOUS OPERATIONS				
Revenues	\$615,952.29	\$834,820.27	-\$218,867.98	
Expenses and taxes	562,136.19	640,047.30	-77,911.11	
MISCELLANEOUS OPERATING INCOME	\$53,816.10	\$194,772.97	-\$140,956.87	
TOTAL OPERATING INCOME	\$36,802,340.11	\$29,355,701.08	+\$7,446,639.03	
NON-OPERATING INCOME				
Income from lease of road	\$157,484.03	\$139,008.07	+\$18,475.96	
Miscellaneous rent income	3,305,336.43	4,989,741.25	-\$1,684,404.82	
Miscellaneous non-operating physical property	918,241.62	1,937,052.28	-1,018,810.66	
Separately operated properties—profit	614,399.60	348,652.81	+\$265,746.79	
Dividend income	10,691,431.05	7,387,682.39	+\$3,307,748.66	
Income from funded securities	5,395,958.56	6,009,557.66	-613,599.10	

	Year ended Dec. 31, 1935	Year ended Dec. 31, 1934	+Increase or -Decrease
NON-OPERATING INCOME—Continued			
Income from unfunded securities and accounts	\$1,249,449.48	\$1,884,301.60	-\$634,852.12
Income from sinking and other reserve funds	160,123.16	169,105.33	-8,982.17
Release of premiums on funded debt		28,413.55	-\$28,413.55
Miscellaneous income	142,417.41	328,318.54	-\$185,901.13
TOTAL NON-OPERATING INCOME	\$22,638,841.34	\$23,221,833.48	-\$582,992.14
GROSS INCOME	\$59,441,181.45	\$52,577,534.56	+\$6,863,646.89
DEDUCTIONS FROM GROSS INCOME			
Rent for leased roads	\$26,366,303.58	\$26,282,477.93	+\$83,825.65
Miscellaneous rents	840,400.65	1,046,524.50	-\$206,123.85
Miscellaneous tax accruals	84,082.26	444,534.36	-\$360,452.10
Separately operated properties—loss	7,448.25	12,947.37	-5,499.12
Interest on funded debt	28,549,102.04	28,744,885.44	-195,783.40
Interest on unfunded debt	3,455,938.69	3,581,175.53	-125,236.84
Maintenance of investment organization	25,814.18	14,699.90	+\$11,114.28
Miscellaneous income charges	2,953.74*	132,624.09	-\$135,577.83
TOTAL DEDUCTIONS FROM GROSS INCOME	\$59,326,135.91	\$60,259,869.12	-\$933,733.21
NET INCOME	\$115,045.54	\$7,682,334.56†	+\$7,797,380.10

NOTE. Included in non-operating income and rent for leased roads are certain intercompany transactions representing credits and corresponding debits amounting to \$6,355.145. Also included in non-operating income are items representing interest and dividends amounting to \$1,646,697 received on securities of and advances to terminal and other railroad companies whose properties are jointly used by this company, as to the major portion of which a like amount was paid by the Company to those companies as rental and included in Joint Facility Rents.

* Credit.
† Deficit.

Profit and Loss Account

BALANCE TO CREDIT OF PROFIT AND LOSS, DECEMBER 31, 1934	\$199,899,462.26
ADDITIONS:	
Credit balance transferred from income for the year	\$115,045.54
Profit on road and equipment sold	4,103.04*
Unrefundable overcharges	33,173.60
Donations	3,328.68
Miscellaneous credits	2,113,389.21
	2,260,833.99
	\$202,160,296.25
DEDUCTIONS:	
Surplus appropriated for investment in physical property	\$107,538.20
Loss on retired road and equipment	4,748,854.20
Miscellaneous debits	1,335,560.41
	6,191,952.81
BALANCE TO CREDIT OF PROFIT AND LOSS, DECEMBER 31, 1935	\$195,968,343.44

* Debit.

West Side Improvements, New York City

These improvements have been progressed without interruption during the year and work on all sections of the depressed roadway between the 30th and 60th Street Yards is now under way. The work of covering the tracks by the construction of the City's Express Highway between 70th and 79th Streets has also progressed.

Elimination of Grade Crossings and Highway Bridge Reconstructions

During the year 9 elimination of grade crossing projects were completed and 6 were under way. The reconstruction of bridges at 3 highway crossings was completed and 7 under way. Most of this work is being carried out with the use of Public Works Administration funds. Negotiations with the Public Authorities are well advanced in each State traversed by the company's lines for 35 additional elimination projects and 38 bridge reconstructions to be carried out under the Public Works Administration program. In New York State arrangements are being made to proceed with 19 additional elimination of grade crossing projects under the regular statutory division of expense but financed in the first instance from State bond issue funds.

For the Board of Directors,
F. E. WILLIAMSON,
President.

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY

and Controlled Companies

Summary of Annual Report to Stockholders for 1935

The following table shows operating results for the Missouri-Kansas-Texas Railroad Company and Controlled Companies for the year 1935 compared with 1934, summarized from the annual report submitted to stockholders at the annual meeting held at St. Louis April 10, 1936.

OPERATING RESULTS COMPARED WITH 1934

	1935	1934	Increase	Per Cent	Decrease	Per Cent
Operating Revenues.....	\$ 27,422,353.92	\$ 26,329,386.77	\$ 1,092,967.15	4.15		
Operating Expenses.....	21,516,647.53	20,592,842.70	923,804.83	4.49		
Net Operating Revenue.....	\$ 5,905,706.39	\$ 5,736,544.07	\$ 169,162.32	2.95		
Taxes.....	1,581,452.99	1,771,109.04			\$ 189,656.05	10.71
Uncollectible Railway Revenues.....	8,642.69	49,389.13			40,746.44	82.50
Railway Operating Income.....	\$ 4,315,610.71	\$ 3,916,045.90	\$ 399,564.81	10.20		
Miscellaneous Income.....	94,785.34	84,001.02	10,784.32	12.84		
Rentals and Other Payments.....	\$ 4,410,396.05	\$ 4,000,046.92	\$ 410,349.13	10.26		
Income for Year Available for Interest.....	\$ 2,443,226.25	\$ 2,057,285.09	\$ 385,941.16	18.76		
Fixed Interest Charges for Year.....	4,213,425.44	4,169,042.73	44,382.71	1.05		
Balance Available for Interest on Adjustment Bonds.....	\$ 1,770,199.19*	\$ 2,111,757.64*	\$ 341,558.45	16.17		
Interest on Adjustment Bonds.....	678,878.36	678,878.36				
Net Income.....	\$ 2,449,077.55*	\$ 2,790,636.00*	\$ 341,558.45	12.24		
*Deficit						

FINANCIAL

There was no change in the amount of preferred or common stock outstanding in the hands of the public during the year.

Long term debt was increased during the year \$2,210,048.69, consisting of a loan received from the Reconstruction Finance Corporation amounting to \$2,294,148.69, and the reduction of equipment trust obligations matured and paid amounting to \$84,100.

Current liabilities represented by equipment notes issued in 1933 matured and were paid in the amount of \$62,020.68.

Interest on 5% Cumulative Adjustment Mortgage Bonds was not declared to be due and payable April 1, and October 1, 1935, by the Board of Directors.

OPERATION

Total operating revenues during 1935 were \$1,092,967 more than in 1934, or 4.15 per cent. Operating expenses during 1935 were \$923,805 more than in 1934, or 4.49 per cent.

A gratifying upward trend in general business obtained during the last half of the year, notwithstanding a light wheat crop in the territory served by these lines, and also a substantial decrease in movement of livestock. Freight revenues for the first six months of 1935 were \$1,031,892 less than for corresponding period of the preceding year. Freight revenues for the last six months were \$2,002,253 more than for the corresponding period of 1934, an increase of 18.64 per cent. Increased cotton production with reduced government loans to cotton farmers, influenced a substantial increase in our cotton tonnage during the last six months of the year. The oil industry as well as other lines of business showed material improvement during the last half of the year and building materials of all kinds, automobiles, and other manufactured products moved in increased volume.

Revenue from passengers carried was \$41,238 more than in 1934, or 2.15 per cent. Revenue from express and mail was \$24,188 more than in 1934, or 1.41 per cent.

Operating expenses were adversely influenced during the year by extraordinary expenditures of \$362,368 occasioned by flood damages to several sections of the railroad. Additionally, depreciation charges were \$287,000 greater than in the previous year. The remaining increase in expense was caused largely by higher labor and material costs, particularly fuel.

Train operation, both freight and passenger, was satisfactorily maintained during the year. The property is being maintained in condition to meet requirements of service.

ADDITIONS AND BETTERMENTS

The more important road improvements completed during the year were—

Rearrangement of overhead bridge and laying track to serve industrial district, Houston, Texas.

Extension of industrial warehouse at Houston, Texas.

Extension of Muskogee, Oklahoma, freight house for processing produce.

Construction of new concrete pier for Brazos River Bridge at Mile Post 1042.5.

Relaying 7 miles of 90-pound rail with new 112-pound rail and 5 miles of 85-pound rail with relay 90-pound rail.

Expenditures for new equipment and improvements to existing equipment amounted to \$78,256, which consisted principally of air-conditioning three chair cars and two dining cars and miscellaneous improvements to locomotives and freight train cars. Equipment retirements for the year, less replacements, were \$367,301. There was a net decrease in value of equipment owned amounting to \$289,045.

The detailed annual report will be furnished upon receipt of request addressed to Missouri-Kansas-Texas Lines, 25 Broad Street, New York City.

MATTHEW S. SLOAN,
Chairman of the Board and President

Visit Texas Centennial Celebrations, June 6—November 29

TRAVEL AND SHIP VIA KATY LINES